

5.

County Council of Middlesex.

REPORT

FOR THE

YEAR 1892,

UPON THE

VITAL & SANITARY CONDITION

OF THE

ADMINISTRATIVE COUNTY OF MIDDLESEX,

BASED UPON THE

REPORTS OF THE DISTRICT MEDICAL
OFFICERS OF HEALTH,

BY

JOHN F. J. SYKES, D.Sc., M.D.

LONDON:

HARRISON AND SONS, ST. MARTIN'S LANE,

Printers in Ordinary to Her Majesty.

1893.

$$\begin{array}{r} B \ 23 \\ \hline 8 \\ \hline 9 \end{array}$$

ADMINISTRATIVE COUNTY OF MIDDLESEX.



05 75
8
9

County Council of Middlesex.

REPORT

FOR THE YEAR 1892 UPON THE
ADMINISTRATIVE COUNTY OF MIDDLESEX,
BASED UPON THE
REPORTS OF THE DISTRICT MEDICAL OFFICERS
OF HEALTH, AND UPON THE CENSUS AND
REGISTRAR-GENERAL'S RETURNS.

BY

JOHN F. J. SYKES,

D.Sc. (Public Health), M.D., etc., Hon. Sec. Incorp. Soc. Med. Offs. Health, Mem. Counc. and Mem. Bd. of Exam. Sant. Inst., Mem. Epidem. Soc., For. Mem. Soc. Franc. d'Hygiène, Mem. Deutsch. Ver.f. "Offentl. Gesundheitspfl." Med. Off. Health St. Pancras, late Assist. Exam. Hygiene, Sc. and Art. Dept., Author of various Works, Contributions, and Official Reports upon Public Health subjects.

LONDON :

HARRISON AND SONS, ST. MARTIN'S LANE,
Printers in Ordinary to Her Majesty.

1893.



CONTENTS.

	PAGE
Map of the Administrative County of Middlesex, shewing the areas, and the density of population per acre, of the Sanitary Districts	1
Introduction	1
PART I.—THE COUNTY.	
CHAP. I.—THE CENSUS OF 1891.	
Registration, ancient, and administrative counties.—Sanitary Districts.—Area, inhabited houses, population, and institutions.—Increase, density, and distribution of population	6
CHAP. II.—VITAL STATISTICS.	
Population.—Institutions.—Births and birth-rates.—Deaths and death-rates.—Ages at death.—Causes of deaths ..	18
CHAP. III.—INFECTIOUS DISEASES.	
Notification and diseases.—Isolation and hospitals.—Disinfection and apparatus.—Vaccination	29
CHAP. IV.—SANITATION.	
Sanitary work generally	42
Inspections.—Complaints.—Infectious diseases notified.—House-to-house inspections.—Premises periodically inspected.—Clerical work	43
Dwellings.—Dwelling-houses.—Housing of the Working Classes Act.—Houses let in separate dwellings.—Common lodging houses.—Canal boats used as dwellings.—Movable dwellings	45
Water-supply and water-service.—Sources.—Wells.—Water-works—Constant supply	49
Drainage and sewerage.—Privies and cesspits.—Water-closets.—Drains.—Cesspools.—Sewers.—Sewage disposal.—Pollution of streams	51
Schools.—Workshops and work places.—Laundries.—Bake-houses	63
Slaughter-houses.—Cowsheds, dairies, and milkshops ..	66
Unsound food.—Adulterated food.—Contagious diseases of animals	67

	PAGE
Nuisances.	68
Scavenging.—Refuse removal.—Refuse disposal	69
Mortuaries.—Burial grounds	72
Open spaces.—Public baths and washhouses	72
Special reports	73

PART II.—SUMMARIES OF THE REPORTS OF THE MEDICAL OFFICERS OF HEALTH OF THE SANITARY DISTRICTS OF THE COUNTY, URBAN AND RURAL, IN ALPHABETICAL ORDER	74
---	----

PART III.—STATISTICAL TABLES.

Table A.—Table of deaths occurring during the year 1892 in the Sanitary Districts of the County of Middlesex, classified according to diseases, ages, and localities . .	
Table B.—Table of population, births, and of new cases of infectious sickness, coming to the knowledge of the Medical Officers of Health during the year 1892 in the Sanitary Districts of the County of Middlesex, classified according to diseases, ages, and localities	
Tables C, I, II, III, and IV.—Tables of sanitary work carried out during the year 1892 in the Sanitary Districts of the County of Middlesex, classified according to subjects and localities	
Table D.—Table of the area at the Census of 1891, and of the inhabited houses and population at the Census of 1881 and at the Census of 1891, of each of the Sanitary Districts in the Administrative County of Middlesex and of their constituent civil parishes, with notes as to the alterations of areas, extracted and compiled from the Census Returns	
Table E.—Table of the Institutions in the County of Middle- sex, with the number of total and of special inmates in each, classified according to their situation in Registration and sub-Registration Districts and civil Parishes, and in Sanitary Districts so far as could be ascertained, extracted and compiled from the Returns of the Census of 1891	

County Council of Middlesex.

TO THE CHAIRMAN AND MEMBERS OF THE
GENERAL PURPOSES COMMITTEE.

GENTLEMEN,

I have the honour of submitting to you herewith the Report upon the health conditions of the Administrative County of Middlesex, for the year 1892, based upon the Reports of the Local Medical Officers of Health and the Census Returns.

The number of Annual Reports received is 30, the last completing the number being received on the 6th October, 1893. Of this number 21 are printed, six are in manuscript, two are type-written, and one is lithographed. The Reports of Hanwell, Heston and Isleworth, Southall-Norwood, Southgate, and Uxbridge Urban, and Brentford Rural Districts are in manuscript; of Edmonton, and Hampton Urban, Districts are type-written; that of Acton Urban is lithographed; and the rest are printed. It is very desirable that all the Reports should be printed, otherwise they cannot receive requisite consideration by the several Local Authorities. Every member of a Local Authority, doubtless, desires to be supplied with a copy, and it is only by printing that a sufficient number of copies can be obtained for this purpose, and also for supplying the Local

Government Board, the County Council, and the Medical and other Officers. Printing also acts as an inducement for the bestowal of more care upon a Report, and enables it to be compiled with more completeness than when laboriously reproduced in manuscript, so that matters that would otherwise be passed over are properly recorded.

The absence of uniformity, and the gaps in information have given rise to many difficulties in compilation. An effort has been made to reconcile these as far as possible, but much remains to be desired in this direction in order to render the Returns for the County complete and comparable. In some cases the forms supplied by the Local Government Board (Tables A and B, Part III) are not attached to or inserted in the Reports, in others the forms are only partly filled in. Those that have not been fully completed I have supplemented, where possible, from the text of the Reports.

Table A in eighteen of the Reports is complete, in three is incomplete, and in nine omitted. Table B in fourteen Reports is complete, in six is incomplete, and in ten omitted. In extracting statistical data to complete the tables it was sometimes found that the numbers given in the text differed, without explanation, from those given in the tables, where these accompanied the Reports, and in a few cases the numbers in the tables themselves disagreed.

Public Institutions always present a difficulty in statistics and especially in a County like Middlesex. In recording the deaths of residents dying in public institutions outside the District, it is desirable also to know the number of residents that are inmates of these Institutions, that they may be added to the population in a corresponding manner

as the deaths outside are added to the deaths within the District, otherwise the death-rate will appear higher than it actually should be. On the other hand, in excluding the deaths of non-residents dying in public Institutions within the District, the number of non-resident inmates in the Institutions should also be deducted from the population, else the death-rate will appear lower than it actually is. But the more frequent error appears to be that of not including the deaths of residents dying outside the District, a course that produces an unduly low death-rate. It would be very desirable for the Local Government Board's forms to be completed and filled in, and to be attached to or included in every Report, and also for the various contents of the text of the Reports to be more conveniently classed together, and for the promiscuous intermingling of various subjects to be avoided as far as possible for the sake of clearness.

Although every effort has been made to extract all the facts possible from the Reports, and to collate them in a comparative form for the whole County, it has not been possible to compile complete information.

There are many subjects upon which your Council will require information in respect to the County, such as the adoptive Acts of Parliament and the bye-laws in force, the notification of infectious diseases, isolation hospital accommodation, disinfecting apparatus, temporary shelters during disinfection, water supplies and areas, drainage and sewerage, sewage disposal, condition of streams and water-courses, scavenging, refuse disposal, and other matters. These are more or less dealt with in this Report, as far as the available information would allow. But

complete Reports upon these and other subjects, embodied either in annual or special Reports, will doubtless become necessary to your Council, supplemented by maps and diagrams where necessary. Probably also from year to year the Annual Reports of the Sanitary Districts will become fuller and more complete.

It possibly may at some time be the desire of your Council and Committee to obtain records at short periods of the infectious diseases prevailing in the County, and of the measures taken to check and prevent them, and also current information upon many subjects.

Beyond the immediate events of the year 1892, an amount of permanent information has been incorporated into the Report that will prove valuable for reference, and a map of the County, showing the areas, and the density of population per acre, of the Sanitary Districts is attached.

The Report is divided into three parts; the first refers to the whole County, the second contains summaries of each of the Reports of the District Medical Officers of Health, and the third consists of statistical tables, the first three of which have been compiled from the Reports of the Medical Officers of Health of the Districts, and the last two from the Census Returns.

In population, according to the Census Returns, the Administrative County of Middlesex stands eighth amongst the 62 Administrative Counties in England and Wales, and before all the 64 County Boroughs, and does not contain either a Municipal or a County Borough. Furthermore, by comparison it would appear that Middlesex is increasing in population far more rapidly than any other Administra-

tive County, a result that may readily be anticipated by reason of its contiguity to the western, north-western, and northern boundaries of the Metropolis.

In submitting this Report I trust that it may be found equal to the claims demanded by such an important County.

I have the honour to be,

Gentlemen,

Your obedient Servant,

JOHN F. J. SYKES.

PART I.—THE COUNTY.

CHAP. I.—THE CENSUS, 1891.

THE REGISTRATION COUNTY OF MIDDLESEX, for Census purposes, and for the registration of births, deaths, and marriages, consists of the six Registration Districts of Staines, Uxbridge, Brentford, Hendon, Barnet, and Edmonton.

The first four are wholly in the Administrative County of Middlesex. Staines consists of the Registration Sub-Districts of Sunbury and Staines; Uxbridge of the Sub-Districts of Hillingdon, Uxbridge, and Hayes; Brentford of Isleworth, Twickenham, Brentford, Chiswick, and Acton; and Hendon of Harrow, Edgware, Willesden, and Hendon.

The last two are only partly in the Administrative County of Middlesex. Barnet consists of the Registration Sub-Districts of South Mimms (partly in Middlesex, partly in Herts), Barnet (Herts), Finchley (Middlesex); Edmonton of the Sub-Districts of Hornsey, Tottenham, Edmonton (all three in Middlesex), Enfield (partly in Middlesex, partly in Herts), Waltham Abbey (Essex), and Cheshunt (Herts).

THE REGISTRATION COUNTY OF SURREY, also contains a portion of the Administrative County of Middlesex, namely, that part of the Registration District of Kingston, embraced in the Registration Sub-District of Hampton, and

comprising the Civil Parishes and co-incident Urban Sanitary Districts of Hampton, Hampton Wick, and Teddington.

THE ANCIENT COUNTY OF MIDDLESEX has had deducted from it: (1) the parishes now forming part of the County of London; (2) part of the Barnet Urban Sanitary District in the Administrative County of Hertford, namely, part of the Parish of Monken Hadley, and part of the Parish of South Mimms; (3) part of the East Barnet Valley Urban Sanitary District in the Administrative County of Hertford, namely, part of the Parish of Monken Hadley, part of the Parish of Enfield, and part of the Parish of South Mimms. The remainder of the Ancient County forms the present Administrative County of Middlesex.

THE ADMINISTRATIVE COUNTY OF MIDDLESEX therefore contains certain Sanitary Districts information as to which is found classed with Districts outside the County, namely, the Civil Parish of South Mimms, which forms part of the Barnet Rural Sanitary District, which District is situated partly in the Administrative County of Middlesex and partly in the Administrative County of Herts, and the Urban Sanitary Districts of Hampton, Hampton Wick, and Teddington, which are situated for statistical purposes in the Registration Sub-District of Hampton, in the District of Kingston, Registration County of Surrey.

At the Census of 1891, the administrative County was found to consist of a total population of 560,012 persons living in 95,088 inhabited houses upon an area of 149,046 statute acres. This area is divided into 30 Sanitary Districts, namely, 25 complete Urban, and four complete Rural, and one which forms part of a Rural Sanitary District in an adjoining County. Table D, Part III, shows the Urban

and Rural Sanitary Districts of the County of Middlesex with their constituent Civil Parishes, area, inhabited houses, population, and changes of area between the Census of 1881 and that of 1891, compiled from the Census Returns. Similarly, Table E, Part III, shows the public institutions in the County with the total number of inmates and officers, and of special inmates, and the Civil Parish, Sub-Registration, and Registration District in which they are severally situated. These institutions have not been classed in the Census Returns according to the Sanitary Districts in which they are situated, but as far as could be ascertained the Sanitary Districts have been added to the table.

It is extremely important that in every Sanitary District the public institutions should be known, and all the statistical data in reference to them be obtained in a complete and accurate form, otherwise it is almost impossible to obtain reliable statistics. This applies with the greatest force to a County like Middlesex, on account of its situation adjacent to the Metropolis, and the large number of metropolitan institutions, schools, asylums, workhouses, transferred into or established within the Administrative County of Middlesex. On the other hand, doubtless a considerable number of suburban residents find their way into public and private hospitals and nursing homes in the Metropolis, but this would not apply to poor law institutions, asylums, &c., which contain the bulk of non-residents.

The increase in population between the Census of 1881, and that of 1891, is shown in Table 1 below. It will be observed that the population of the County has increased at the enormous rate of 52·4 per cent. in the ten years, that Rural

Districts have only increased 15·2 per cent., whereas the Urban exhibit an increase of 57·8 per cent. Of the Urban Districts, Wood Green shows the largest increment 161·4 per cent., followed by Willesden with 121·9, Hornsey 96·5, Tottenham 95·0, these again followed by Edmonton and Enfield, all seven above the mean increase of the Urban Districts. On the other hand, the population of Harrow has only grown 3·0 per cent., Uxbridge 7·0, Staines 9·3, and Hampton Wick 9·8 per cent. Of the Rural Districts, Hendon has enlarged her population by 25·9, whereas the Brentford population has decreased 3·3 per cent., this last is the only District showing a decrease in the number of inhabitants.* To this table the estimated populations to the middle of 1892, obtained by the Registrar-General's logarithmic method have been added, but, in calculating the birth and death-rates subsequently they have not been used on account of the disturbing influences of public institutions. They are useful for the purpose of comparison with the populations given in the Reports of the Districts.

* This decrease only represents a diminution of 23 inhabitants in a Rural District, with a total population of only 683 at the previous census.

TABLE 1.
ADMINISTRATIVE COUNTY OF MIDDLESEX.

Sanitary Districts.	Number of Civil Parishes or parts of Civil Parishes.	Population.				* Estimated Population to middle of 1892.
		Census 1881.	Census 1891.	Increase.	Increase per cent.	
URBAN (Total)	30	320,787	506,281	185,494	57.8	538,313
Acton	1	17,126	24,206	7,080	41.3	25,276
Brentford	2	11,805	13,738	1,933	16.3	14,005
Chiswick	1	15,975	21,963	5,988	37.4	22,855
Ealing	1	15,769	23,979	8,210	52.0	25,269
Edmonton	1	15,174	25,381	10,207	67.2	27,074
Enfield ..	2	18,944	31,536	12,592	66.4	33,610
Finchley	1	11,191	16,647	5,456	48.7	17,494
Friern Barnet	1	6,424	9,173	2,749	42.7	9,591
Hampton	1	4,776	5,822	1,046	21.9	5,968
Hampton Wick..	1	2,164	2,378	214	9.8	2,406
Hanwell..	1	5,178	6,139	961	18.5	6,271
Harrow ..	1	5,558	5,725	167	3.0	5,746
Hendon ..	1	10,484	15,843	5,359	51.1	16,682
Heston and Isleworth..	2	22,727	26,273	3,546	15.6	26,754

Hornsey..	..	1	22,485	44,205	21,720	96.5	48,103
Southall-Norwood	..	1	6,681	7,627	946	14.1	7,754
Southgate	..	2	8,289	10,970	2,681	32.3	11,361
South Hornsey ..	..	1	14,593	16,892	2,299	15.7	17,204
Staines ..	..	1	4,628	5,060	432	9.3	5,117
Teddington	..	1	6,599	10,052	3,453	52.3	10,595
Tottenham	..	1	36,574	71,343	34,769	95.0	77,557
Twickenham	..	1	12,479	16,027	3,548	28.4	16,536
Uxbridge	..	2	7,669	8,206	537	7.0	8,276
Willesden	..	1	37,613	61,265	33,652	121.9	67,682
Wood Green	..	1	9,882	25,831	15,949	161.4	29,127
RURAL (Total)	..	30	46,608	53,731	7,123	15.2	54,706
(Barnet) South Mimms	..	1	2,628	2,966	338	12.8	3,011
Brentford	..	3	683	660	23†	3.3†	657
Hendon ..	..	6	10,987	13,834	2,847	25.9	14,238
Staines ..	..	12	19,146	21,832	2,686	14.0	22,193
Uxbridge	..	8	13,164	14,439	1,276	9.6	14,607
COUNTY (Urban and Rural)	..	60	367,395	560,012	192,617	52.4	593,019

*The estimated populations of the Districts are calculated by the Registrar-General's logarithmic method, the Totals are obtained by the addition of the estimated populations of the Districts.

† Decrease.

The increase in the number and proportion of uninhabited houses in the census decennium, is shown in Table 2. It will be seen that the greatest increase in the Urban Districts has been in Wood Green 174·8, Willesden 154·8, Hornsey 104·3, Tottenham 94·7, Edmonton 77·4, Enfield 64·1 per cent., corresponding to the percentage increase of population. On the other hand, the least increase has taken place in Uxbridge 7·2, South Hornsey 7·9, Hampton Wick 9·6, and Staines 15·1 per cent. The correspondence between the increase of population and of inhabited houses is not observable in the case of Harrow and South Hornsey. In the former the increase in the number of houses, 28·5 per cent., is considerably higher than the increase of population which is only 3·0 per cent., probably due to School buildings; on the other hand, in the latter the increase of population, 15·7, has been more than double that of inhabited houses, due to closer packing of the population. Of the Rural Districts, as in the case of population, the number of inhabited houses has increased most in Hendon, 31·3 per cent., and least in Brentford, where none is recorded. Comparing the Urban with the Rural Districts, in the former the increase has been 61·8, against 18·7 per cent. in the latter.

The density of inhabited houses and of persons per acre and of persons per house, has also been worked out in Table 2. Practically, per acre, the density of houses is proportionate to the density of persons. In the Urban Districts the density of persons per acre is highest in South Hornsey 73·4, Tottenham 23·7, Chiswick 17·6, Wood Green 15·8, Hornsey 15·7, Willesden 13·9, Brentford 12·4, and Acton 10·5; and lowest in Hendon 1·9, and Hampton Wick 1·8. In the Rural Districts the density is still lower,

ranging between 0·9 in Staines and 0·2 in Brentford Collectively, the density in the Rural Districts is 0·7, and in the Urban 6·8 persons per acre.

The number of persons per house in the Rural Districts is 5·2 and in the Urban 5·9, the greatest being in Friern Barnet 8·2, Southall-Norwood 7·8, South Hornsey 7·6, and Willesden 7·5; the least being in Brentford 4·6, and South Mimms 4·8 (Rural Districts), and in Uxbridge 4·7, Hampton 4·9, and Staines 4·9 (Urban Districts). But density per house depends very much upon the size and style of the houses. A better idea of how the population is housed can be obtained from Table 3. It appears that in every 100 inhabited houses the number of tenements of four rooms and less is over 50 in the Urban Districts of Acton, Chiswick, Hendon, South Hornsey, and Willesden; and under 30 in Ealing, Hampton, Hampton Wick, Hanwell, Hornsey, Staines, and Teddington. The condition is even better seen in the respective number of tenements of one, two, three or four rooms. In Acton, Chiswick, Ealing, Friern Barnet, Hornsey, South Hornsey, and Willesden, the three-roomed tenements are more numerous than the four-roomed, and in South Hornsey the two-roomed tenements more numerous than the three-roomed. But comparing the number of one-roomed tenements to the number of inhabited houses, the proportion per cent. in the Urban Districts appears as follows:—Willesden 17, South Hornsey 14, Acton 11, Hendon 9, Chiswick 8, Tottenham 7, and Edmonton and Brentford 5; whereas Uxbridge, Enfield, and Southall have under 2, and Staines under 1 per cent.

TABLE 2.
ADMINISTRATIVE COUNTY OF MIDDLESEX.

Sanitary Districts.	Area in Statute Acres.	Inhabited Houses.				Census, 1891.		
		Census, 1881.	Census, 1891.	Increase.	Increase per cent.	Inhabited Houses per Acre.	Persons per Acre.	Persons per House.
URBAN	74,039	52,328	84,667	32,339	61.8	1.14	6.8	5.9
Acton ..	2,305	2,853	4,054	1,201	42.1	1.76	10.5	5.9
Brentford ..	1,019	2,240	2,610	370	16.5	2.35	12.4	5.2
Chiswick ..	1,245	2,657	3,787	1,130	42.5	3.04	17.6	5.8
Ealing ..	2,928	2,601	4,224	1,623	62.4	1.44	8.2	5.6
Edmonton ..	3,903	2,363	4,194	1,831	77.4	1.07	6.5	6.0
Enfield ..	12,611	3,538	5,808	2,270	64.1	0.46	2.5	5.4
Finchley ..	3,384	1,884	2,917	1,033	54.8	0.86	4.9	5.7
Friern Barnet ..	1,304	689	1,117	428	62.1	0.85	7.0	8.2
Hampton ..	2,036	917	1,181	264	28.7	0.58	2.8	4.9
Hampton Wick ..	1,315	417	457	40	9.5	0.34	1.8	5.2
Hanwell ..	1,067	717	1,069	352	49.1	1.00	5.7	5.7
Harrow ..	1,047	858	1,103	245	28.5	1.05	5.4	5.2
Hendon ..	8,382	1,571	2,395	824	52.4	0.28	1.9	6.6

Heston and Isleworth	6,967	4,064	4,726	662	16·3	0·67	3·7	5·5
Hornsey ..	2,809	3,665	7,489	3,824	104·3	2·67	15·7	5·9
Southall-Norwood	2,461	715	971	256	35·8	0·39	3·1	7·8
Southgate ..	3,578	1,524	2,038	514	33·7	0·57	3·0	5·3
South Hornsey	230	2,060	2,223	163	7·9	9·66	73·4	7·6
Staines ..	1,843	888	1,022	134	15·1	0·55	2·7	4·9
Teddington	1,214	1,216	1,935	719	59·1	1·59	8·3	5·2
Tottenham..	3,010	6,066	11,812	5,746	94·7	3·92	23·7	6·0
Twickenham	2,415	2,360	3,099	739	31·3	1·28	6·6	5·1
Uxbridge ..	862	1,606	1,723	117	7·2	1·97	9·5	4·7
Willesden ..	4,383	3,203	8,162	4,959	154·8	1·86	13·9	7·5
Wood Green	1,631	1,656	4,551	2,895	174·8	2·82	15·8	5·6
RURAL	75,007	8,774	10,421	1,647	18·7	0·13	0·7	5·2
(Barnet) South Mimms ..	6,301	567	617	50	8·8	0·09	0·4	4·8
Brentford ..	3,041	142	142	0	0	0·04	0·2	4·6
Hendon ..	19,756	2,018	2,651	633	31·3	0·13	0·7	5·2
Staines ..	22,488	3,485	4,151	666	19·1	0·18	0·9	5·2
Uxbridge ..	23,421	2,562	2,860	298	11·6	0·12	0·6	5·0
COUNTY { Urban and Rural }	149,046	61,102	95,088	33,986	55·6	0·63	3·7	5·8

TABLE 3.
ADMINISTRATIVE COUNTY OF MIDDLESEX.

Census 1891. Sanitary Districts.	Total number of Inhabited Houses.	Total number of tenements or families or separate occupiers.	Total number of tenements of four rooms and less.	Number of tenements of			
				One room.	Two rooms.	Three rooms.	Four rooms.
URBAN—							
Acton	5,165	2,057	447	482	611	517
Brentford	2,904	1,292	131	289	229	643
Chiswick	4,658	2,158	245	394	845	674
Ealing	4,704	932	137	266	365	164
Edmonton	4,664	1,550	213	230	344	763
Enfield	6,121	1,741	85	219	292	1,145
Finchley	3,215	1,116	100	231	283	502
Friern Barnet	1,328	401	41	75	152	133
Hampton	1,251	276	24	54	69	129
Hampton Wick	493	143	10	19	28	86
Hanwell	1,127	287	23	52	61	151
Harrow	1,171	399	40	34	55	270
Hendon	3,048	1,512	218	381	429	484

Heston and Isleworth	..	4,726	5,026	1,766	151	297	297	1,021
Hornsey ..	..	7,489	8,655	1,869	163	499	651	556
Southall-Norwood	..	971	1,032	323	12	51	87	173
Southgate..	..	2,038	2,246	784	45	125	172	422
South Hornsey	..	2,233	3,460	1,579	305	538	461	272
Staines ..	..	1,622	1,057	292	19	18	33	222
Teddington	..	1,935	2,006	237	21	43	35	138
Tottenham ..	..	11,812	14,610	5,534	779	1,113	1,712	1,930
Twickenham	..	3,059	3,338	1,003	65	161	151	626
Uxbridge ..	..	1,723	1,751	600	29	78	58	435
Willesden ..	..	8,162	13,074	7,493	1,413	2,143	2,408	1,529
Wood Green ..	..	4,551	5,321	1,491	128	236	486	641
RURAL—								
(Barnet) South Mimms	..	617	*641	242	*16	*30	*50	*146
Brentford ..	..	142	147	80	2	8	13	57
Hendon ..	..	2,651	2,768	978	64	156	184	574
Staines ..	..	4,151	4,222	1,831	52	143	223	1,413
Uxbridge ..	..	2,860	2,977	1,366	23	155	197	991

* Estimated in proportion to the number of inhabited houses in the Barnet Rural Sanitary District.

CHAPTER II.—VITAL STATISTICS.

POPULATION.

The estimated population for 1892 of each of the Sanitary Districts, as given by the Medical Officer of Health, has been accepted as correct. Local knowledge enables him to apply the necessary corrections for public institutions, but it would be desirable in all cases that these corrections should be stated, otherwise wrong conclusions are apt to be drawn. A careful estimate of population, recording the number of residents who are inmates of public institutions outside the District, and the number of non-residents who are inmates of public institutions within the District, is necessary as a basis of accurate statistics.

In some instances it is not possible to eliminate public institutions from the statistics of a locality; for instance, Dr. Fletcher Little (Harrow), in speaking of Harrow School, says, "it is necessary, therefore, to regard the School as an integral part of the town, for whatever affects the one may affect the other." Dr. Charles D. Green (Edmonton) experiences difficulty in obtaining exact statistics, his District containing the Edmonton Union and the Strand Union, including the Strand Union Schools. The latter does not belong to the District; the former contains a minor proportion of Edmonton residents, but he says, "I have no Returns at my disposal from which I can calculate the relative proportions." It is very desirable that Union Authorities or Union Workhouses and Schools should furnish Returns to the several Sanitary Districts whence the inmates are derived. A small fee would

probably have to be paid, but it would be a small price to pay for correct statistics.

In Table 4 the Birth-Rate, Death-Rate, and Infantile-Mortality Rate of each of the Sanitary Districts are set out, but certain omissions have prevented a complete record being framed. Wherever only partial corrections for public institutions have been made, in order to avoid inaccuracy, they have not been taken into consideration.

TABLE 4
ADMINISTRATIVE COUNTY OF MIDDLESEX.

Sanitary Districts.	Estimated Population, 1892.	Births, 1892.	Birth- Rate.	Deaths, 1892.	Death- Rate.	Deaths under 1 year, 1892.	Infantile Mortality per 1,000 Births.	Notes.
URBAN.								
Acton ..	25,000	763	30·5	425	17·0	141	188	Excluding Strand Union & Schools, including Edmon- ton Union.
Brentford (Urban)	13,950	492	35·2	294	21·0	97	197	
Chiswick ..	22,782	679	29·8	392	17·2	115	169	
Ealing ..	26,500	492	18·5	316	11·9	61	124	
Edmonton ..	25,565	927	36·2	593	23·1	163	175	
Enfield ..	33,570	1,072	32·1	458	13·6	123	114	Excluding Colney Hatch Asylum.
Finchley ..	17,042	477	27·5	207	12·2	43	90	
Friern Barnet ..	7,004	191	27·2	79	11·2	15	78	
Hampton ..	5,800	144	24·8	85	14·6	?	?	Population esti- mated very high.
Hampton Wick ..	2,378	67	28·6	29	12·2	5	75	
Harrow ..	6,274	161	25·5	81	12·8	18	111	
Harrow ..	6,876	142	20·6	84	12·2	16	112	

Hendon (Urban)	431	26.0	308	19.2	?	?
Heston and Isleworth	?	29.8	? 414	16.7	106	?
Hornsey	1,169	25.2	508	10.9	121	103
Southall-Norwood	193	37.3	75	14.4	26	135
Southgate	302	28.1	144	13.4	35	116
South Hornsey	389	22.8	214	12.5	74	190
Staines (Urban)	149	29.2	72	11.1	15	108
Teddington	293	27.9	140	13.3	25	85
Tottenham	2,429	33.0	1,237	16.8	361	149
Twickenham	406	25.3	250	15.6	42	103
Uxbridge (Urban)	197	24.0	135	16.6	?	?
Willesden	2,085	31.7	945	14.3	333	159
Wood Green	982	35.1	392	14.0	116	118
RURAL.						
(Barnet) South Mimms	?	?	35	?	5	?
Brentford (Rural)	14	19.9	3	4.3	1	71
Hendon	362	26.1	183	13.0	37	102
Staines	598	27.3	377	17.1	?	?
Uxbridge	433	30.7	257	18.0	?	?

Excluding non-residents in Union.

Excluding London County Asylum and St. Marylebone Schools. Excluding Northern Fever Hospital.

Excluding non-residents in Union.

BIRTHS.

Southall-Norwood recorded the highest birth-rate followed by Edmenton, Brentford (Urban), and Wood Green; and the lowest appears in Ealing, Brentford (Rural), Harrow, and South Hornsey. The age distribution of the population has a material effect upon the birth-rate, a preponderance of children at school ages and of elderly persons will tend to lower it, whilst a preponderance of persons at marriageable ages will tend to have the reverse effect.

The birth-rates per 1,000 of population of the Urban and Rural Districts and of the County, compared to England and Wales, were as follows:—

Localities.	Population.	Births.	Birth-Rates.
Urban Districts (Exclusive of Heston and Isleworth)	495,281	14,632	29·5
Rural Districts (Exclusive of South Mimms)	50,821	1,407	27·7
Administrative County .. (Exclusive of above mentioned Districts)	546,102	16,039	29·4
England and Wales ..	29,403,346	897,270	30·5

DEATHS.

In considering the death-rates, it must again be observed that unless the deaths of residents dying outside a District are included in the number of deaths, the rate of the District is unduly lowered. In only six Districts have such deaths been included, and in some of these the number is so small as to suggest that possibly they might be supplemented. It is obvious that if the deaths of non-residents in Union workhouses, for instance, are excluded from the District in which the union is situated, and are not included among the deaths of the District in which they were previously residents, that these deaths can never appear at all in a Return for the whole County. This would seem to have happened, as the death-rate of the Urban Districts of the County is lower than that of the Rural, a result not usually expected. The table below shows the comparative death-rates per 1,000 of population.

Localities.	Population.	Deaths.	Death-Rates.
Urban Districts (Exclusive of Heston and Isleworth)	495,281	7,463	15·1
Rural Districts (Exclusive of South Minnis)	50,821	820	16·1
Administrative County .. (Exclusive of above mentioned Districts)	546,102	8,283	15·2
England and Wales ..	29,403,346	559,090	19·0

The highest death-rate among the Sanitary Districts appears in the Edmonton Urban District (23·1), but it must be observed that this is unduly high, that Dr. Green was supplied with no Return as to the number of deaths and of persons in the Union Workhouse not belonging to the Edmonton Sanitary District, and that hence it has not been possible to exclude the deaths in the Union. Excluding both population and deaths in Edmonton Union the death rate appears as 16·8 per 1,000, and including both population and deaths of that institution as 23·1 per 1,000. Dr. Green takes the mean of these and finds it to be 19·9 per 1,000, probably a more correct estimate. That being the case the death rate of the Brentford Urban District appears as the highest, and doubtless this is correct, as it would appear to be swollen by the number of deaths of young children. Hendon Urban District (19·2) has the third highest death rate, all three Districts being above the mean rate for England and Wales. The lowest rates were in Hornsey, 10·9; Friern Barnet, 11·2; and Ealing, 11·9.

DEATHS AT VARIOUS AGES.

The data of deaths at various age periods, as shown in Table A, Part III, are not sufficiently complete to base any reliable statistics for the whole County upon. The deaths under one year of age, being more complete than at other ages, afford a means of obtaining approximate rates. The observations with reference to the inclusion of deaths of residents outside a District, do not apply with such force to these deaths as to the total deaths, for two reasons, the one that infants are less likely to die outside a District than adults, the other that as the rate is based upon the number of births and not upon the population, public institutions

have much less effect in modifying the basis of calculation, and therefore, the infantile mortality per 1,000 births, as shown in the table that follows, is a much more sensitive and accurate gauge than the total death-rate, provided that the age distribution of the population is not excessively disproportionate.

Localities.	Births.	Deaths under 1 year.	Infantile Mortality per 1,000 Births.
Urban Districts (Exclusive of Hampton, Hendon, Heston and Isleworth, and Uxbridge)	13,860	1,945	140
Rural Districts (Exclusive of South Mimms, Staines, and Uxbridge)	376	38	101
Administrative County .. (Exclusive of above mentioned Districts)	14,236	1,983	139
England and Wales ..	897,270	132,603	148

The ratio between the rates of infantile mortality in the Urban and Rural Districts, tends to confirm the impression

that the rate of general mortality in the Urban Districts as compared with that in the Rural (see previous tabular statement), is due, as before mentioned, to the deaths of a certain number of residents, dying outside the respective Sanitary Districts, escaping record

The highest infantile mortality rate, 197 per 1,000 births, prevailed in the Brentford (Urban) District, and Mr. Bott points out that during 1892, and “the three previous years, that this rate is increasing enormously, and it is a matter of vital importance to the welfare of the town that it should be reduced.” This accords with the fact that the general death rate of this District is also the highest in the County. South Hornsey follows next with 190 per 1,000 births, and this, coupled with the fact that the birth rate was only 22·8 per 1,000 of population, leads to the probability that the inclusion of the deaths of residents outside the District would have produced a higher death rate than 12·5 in this the most densely populated District of the County. Acton follows next with 188, and Edmonton, Chiswick, Willesden, and Tottenham are all above the mean for England and Wales, 148 per 1,000 births. The lowest rates are found in Hampton Wick 75, Friern Barnet 78, Teddington 85, and Finchley 90, all were under 100 per 1,000 births.

CAUSES OF DEATH

As the Returns under this head are more or less incomplete, it is not possible to base any reliable calculations for the County upon them as a whole. (See Table A, Part III.)

The Principal Zymotic Diseases.—The Registrar-General includes in the *seven* principal zymotic diseases: small pox,

measles, scarlet fever, diphtheria, whooping cough, fever (typhus, enteric, and simple fevers), and diarrhoeal diseases (diarrhoea, dysentery, and cholera). The omission of simple cholera, the addition of croup, and other changes introduced into this class, tend to modify what were known as death-rates from the principal zymotic diseases and to render them incomparable one with another. The notifiable infectious diseases scheduled in the Infectious Diseases (Notification) Act, namely, small pox, cholera, diphtheria, membranous croup, erysipelas, scarlatina or scarlet fever, and typhus, typhoid or enteric, relapsing, continued, and puerperal fevers form another group, to which measles is in some cases added, and perhaps also whooping cough. The two groups or classes are distinct as a whole, and any attempt to form a compromise between them or to modify them tends to vitiate the results of calculations. It is becoming apparent that it is necessary to explicitly state the diseases that are included in any death rates for groups of diseases in order to avoid errors, and especially errors of comparison with recognised standards. The notifiable infectious diseases will be considered later on.

Influenza.—There appears to have been a general prevalence of this disease throughout the County, in common with the rest of the country, during January, although in some Districts the fatality directly attributable to the disease was higher than in others.

Diarrhoea.—The statistical data, so far as they go, show that this was the cause of deaths which gave the highest proportionate rates in Southall-Norwood, Acton, Brentford, and Edmonton. But it will be seen by the following table that the data are by no means complete, and in some instances the numbers are too small to base definite conclusions upon.

Sanitary Districts.	Deaths.	Per 1,000 Popu- lation.	Sanitary Districts.	Deaths.	Per 1,000 Popu- lation.
URBAN.			Staines	0	0
Acton	34	1·35	Teddington	0	0
Brentford	18	1·29	Tottenham	48	0·65
Chiswick	20	0·88	Twickenham	6	0·38
Ealing	5?	0·16	Uxbridge.. ..	0	0
Edmonton.. ..	32	1·18	Willesden	39	0·59
Enfield	?	?	Wood Green	25	0·89
Finchley	11?	0·64			
Friern Barnet	?	?	RURAL.		
Hampton	0	0	(Barnet) South Mimms..	0	0
Hampton Wick	1	0·42	Brentford	0	0
Hanwell	3	0·48	Hendon	2	0·14
Harrow	3	0·44	Staines	?	0·09
Hendon	?	?	Uxbridge.. ..	7	0·49
Heston and Isleworth	?	?			
Hornsey	6	0·13	County of Middlesex ..	?	?
Southall-Norwood	8	1·54	England and Wales ..	14,291	0·48
Southgate	1	0·09			
South Hornsey	4?	0·23			

CHAPTER III.—INFECTIOUS DISEASES.

NOTIFICATION.

The Infectious Diseases (Notification) Act, 1889, appears to have been adopted in nearly all of the Sanitary Districts. As will be seen by reference to Table 5, it is possible to gather from the Reports of the Medical Officers that it has been adopted in 26 out of the 30 Districts of the County; in three it is only apparent, and in one other it is doubtful. In Hampton it is difficult to suppose that not a single case of scarlet fever has occurred, and some of the figures in the form of the Local Government Board, Table B, Part III, would tend to show that a complete record in all cases has not been obtained, especially from those Districts in which the official form has not been used, and from others where it has only been partly completed. It has not been possible to ascertain in all cases when the Act was adopted, but two Districts, namely, South Hornsey and Brentford (Rural), only adopted the Act during 1892. It will be observed that Hendon (Urban) has omitted erysipelas from the schedule and added measles and whooping cough, and that Hendon (Rural) and Heston and Isleworth have both added measles to the schedule of notifiable diseases.

In reference to the number of cases notified, the returns were absent or only partial from Hampton, Hendon (Urban), South Hornsey, Brentford (Rural), and Staines (Rural), and no proportion per 1,000 of population could be calculated. Of the remaining districts the highest proportion of cases per 1,000 of population is recorded in Enfield 14·3, Hendon (Rural) 12·9, Southall-Norwood 10·8, Finchley 10·8, and Wood Green 10·2.

TABLE 5.
ADMINISTRATIVE COUNTY OF MIDDLESEX.

SANITARY DISTRICTS.	Notification Act adopted ?	When.	Diseases added to or omitted from Schedule.	No. of cases notified during 1892.	Cases per 1,000 Popu- lation.
URBAN.					
Acton	Yes	..	..	180	7.2
Brentford	Yes	..	..	137	9.9
Chiswick	Yes	Jan., 1890	..	124	5.4
Ealing	Yes	Jan., 1890	..	197	7.4
Edmonton	Yes	..	..	243	9.0
Enfield.. ..	Apparently	..	..	482	14.3
Finchley	Apparently	..	..	184	10.8
Friern Barnet	Yes	1890	..	56	8.0
Hampton .. ..	?	..	..	6?	—
Hampton Wick	Yes	Feb., 1890	..	13	5.5
Hanwell	Yes	Mar., 1890	..	61	9.7
Harrow	Yes	1890	..	18	2.6
Hendon	Yes	..	{ Erysipelas omitted, measles and whooping cough added }	No return	—
Heston and Isleworth..	Yes	Jan., 1890	{ Measles added }	145*	5.4
Hornsey	Yes	Jan., 1890	..	340	7.3
Southall-Norwood	Yes	July, 1891	..	55	10.8
Southgate	Yes	Dec., 1889	..	108	10.0
South Hornsey	Yes	Sept., 1892	..	—	—
Staines	Yes	1890	..	17	3.3
Teddington	Yes	Feb., 1890	..	25	2.4
Tottenham	Yes	..	..	717	9.7
Twickenham	Yes	Jan., 1890	..	123	7.7
Uxbridge	Yes	..	..	55	6.7
Willesden	Yes	5 years	..	634	9.7
Wood Green	Apparently	..	..	287	10.2
RURAL.					
(Barnet) South Mimms	Yes	Feb., 1890	..	8	—
Brentford	Yes	1892	..	—	—
Hendon	Yes	..	{ Measles added }	181*	12.9
Staines	Yes	Dec., 1891	..	{ Return only of 4 mths. }	—
Uxbridge	Yes	Jan., 1890	..	81	5.7

* Exclusive of measles.

SMALLPOX.

The total number of cases of smallpox recorded is 24, of which 13 occurred in Acton, 5 in Hendon (Rural), 5 in Willesden, 3 in Enfield, 4 in Tottenham, 2 in Hornsey, and 2 in Edmonton Districts. Some of these cases were removed for treatment to the Smallpox Hospital at Highgate. Cases from Willesden are mentioned as being so removed into London. No doubt smallpox can be better isolated in hospital than it can be at home; but it has been shown that smallpox, unlike other infectious diseases, tends to spread even in the neighbourhood of hospitals where cases of the disease are aggregated, and the removal of smallpox cases from one populous locality to another equally or more populous, is contra-indicated by experience.

SCARLATINA.

Scarlet fever was prevalent throughout the County, as well as in London, towards the end of the summer. Many of the Sanitary Districts appear to have suffered from the presence of the disease in epidemic proportions. Special mention is made in the Reports of Brentford, of Edmonton, where the schools were closed in consequence, of Twickenham, where two public institutions, namely, the City Police Orphanage and Boys' Home, were severely smitten, of Willesden, of Harrow (Rural), Harrow Weald being the locality affected, and of Staines (Rural), where the schools were kept closed for nine weeks.

DIPHTHERIA AND MEMBRANOUS CROUP.

Diphtheria, together with membranous croup, also appears to have increased in prevalence during the year, *pari passu* with scarlet fever. As Dr. Skinner (Willesden)

says, "the near relation of this disease to scarlet fever, I think, has been shown this year by the way it has increased side by side with it." Special mention is made of the prevalence of the disease in the Reports of Acton, Finchley, Willesden, Wood Green, and Hendon (Rural) Districts. In Wood Green, Mr. C. H. Conolly says that, as in the case of typhoid fever, "a large proportion of the cases occurred in the low-lying part of the District." This is additional testimony to the fact that dipttheria is attacking Districts on all levels, as formerly it was held that the disease had a marked preference for high levels. In Harrow Weald (Hendon Rural) the outbreak, in conjunction with the previous prevalence of scarlet fever led to an inquiry being held by an Inspector of the Local Government Board, into the condition of the District, an inquiry that the medical officer says, addressing the Board, "will strengthen your hands as well as mine."

TYPHUS FEVER.

Quoting from the Report of Mr. H. Bott, Brentford Urban District:—"Early in May three cases of typhus fever occurred in a common lodging house. The first of these was discovered at the West London Hospital, and was treated at a hospital of the Metropolitan Asylums Board. The other two were removed as soon as discovered to our Isolation Hospital, where they both eventually recovered. Most careful inquiries were made as to the probable cause of the outbreak, but without result; and I can only attribute it to the dirty habits of the family attacked, and to the filthy bedding and want of proper ventilation." Prompt measures were taken to destroy a large quantity of filthy bedding, and to close the house, which was subsequently thoroughly disinfected and cleansed.

The presence of typhus invariably indicates filth and over-crowding, such as appears to have been present in this instance.

ENTERIC FEVER.

As this disease is held to be an indication of greater or less value of the sanitary condition of a locality, the proportionate number of cases per 1,000 of population has been calculated for each Sanitary District in the table below :—

Sanitary Districts.	Cases notified.	Per 1,000 population.	Sanitary Districts.	Cases notified.	Per 1,000 population.
URBAN.			Southall-Norwood ..	2	0·38
			Southgate ..	8	0·74
Acton	15	0·60	South Hornsey ..	?	?
Brentford	6	0·43	Staines ..	4	0·78
Chiswick	12	0·53	Teddington ..	1	0·09
Ealing	14	0·53	Tottenham ..	94	1·28
Edmonton	26	0·96	Twickenham ..	7	0·43
Enfield	101	3·01	Uxbridge ..	2	0·24
Finchley	4	0·23	Willesden ..	28	0·43
Friern Barnet ..	2	0·28	Wood Green ..	18	0·64
Hampton	1	0·14			
Hampton Wick ..	5	2·10	RURAL.		
Hanwell	5	0·79	(Barnet) South Mimms..	—	—
Harrow	2	0·29	Brentford	?	?
Hendon	?	?	Hendon	10	0·71
Heston and Isleworth ..	12	0·45	Staines	?	?
Hornsey	21	0·45	Uxbridge	8	0·57

The figures, so far as it has been possible to obtain them, may be ranged for purposes of comparison in two categories, under 1 per 1,000 of population, and 1 and over, although possibly ·5 would be nearer the average limit of proportion permissible. Three districts had an excess of

1 case per 1,000 of population, namely Enfield 3·01, Hampton Wick 2·10, and Tottenham 1·28. In Hampton Wick the total number of cases was only 5; the population is small, and the disease caused no deaths. In both Enfield and Tottenham the disease caused 16 deaths, but the former has less than half the population of the latter, the death rate from this disease in the two Districts per 1,000 population being respectively 0·48 and 0·22. The total death rate from fevers (*i.e.*, typhus, typhoid, and continued) in England and Wales during 1892 was 0·14, and in the 33 great towns 0·15, the high death rate from this cause in these two Districts is therefore apparent, especially that of Enfield. It appears that an epidemic of enteric fever prevailed there in 1891, and was investigated by a inspector of the Local Government Board, and that since then alterations in the sewers, and the sewage farm have been made, as well as "several other sanitary changes."

CONTINUED FEVER.

Only three Districts record cases of continuous fever; Chiswick 12, Tottenham 2, and Wood Green, 1. If this disease represents a mild and unrecognised type of enteric fever, the number of enteric cases in Chiswick would be 24 instead of 12, but this appears improbable as only two deaths from that cause took place in Chiswick, and the mortality from typhoid fever is about 1 in 5 cases. It is therefore probable that under this head is included simple febrile rise of temperature, although Chiswick adjoins Brentford, in which the typhus cases occurred, but there is no reference to any connection with that outbreak.

PUERPERAL FEVER.

In Hornsey it would appear that two cases of puerperal fever were not notified, inasmuch as 10 deaths are

recorded, and only eight cases occur in the return of notifications. It is probable that, on account of the many *aliases* possessed by this disease, deaths certified under some other term have very properly been included under the head of puerperal fever. Medical Officers of Health are frequently placed in a difficulty for want of a definition of what is embraced by "puerperal fever."

CHOLERA.

It has been definitely considered by the Local Government Board that under the head of cholera, simple cholera, English cholera or cholera nostras, and Asiatic cholera are included. It is necessary to call attention to this fact because in Enfield one case and no death was certified, in Twickenham two cases and one death, in Willesden one case and one death, whereas in Uxbridge of the seven deaths certified none are recorded as having been notified. This is another of the minor difficulties of nomenclature that is apt to prove confusing to the medical profession, and it would be well to be quite clear what is embraced by the term "cholera."

In the Autumn of the year the outbreak of cholera at Hamburg and the circular letters of the Local Government Board, prompted most of the Sanitary Authorities to take extra precautions for the prevention of disease and stimulated the progress of sanitary measures. The majority of Medical Officers of Health in the County drafted and circulated printed instructions for the guidance of the inhabitants of the several Districts in taking measures to promote cleanliness and prevent disease, and in some instances consideration was given to the provision of hospital accommodation in preparing for an outbreak.

ERYSIPELAS.

Hendon (Urban) has excluded this disease from the schedule of notifiable diseases. Opinion is much divided upon this question, although in some cases the disease may be slight and comparatively benign, in others it may be severe and highly infectious, especially to parturient women, causing a form of puerperal fever.

In the household, ordinary cases do not, as a rule, call for more than reasonable care and cleanliness, but in public institutions, such as workhouses, asylums, etc., and places where a number of persons are aggregated together, serious epidemics of the disease occur from time to time.

MEASLES.

Measles has been added to the list of notifiable diseases in Hendon Urban and Rural Districts, and also in Heston and Isleworth. During the year a wave of measles passed over the County, and epidemics are reported to have occurred in most Districts. Notably in Chiswick, in the Spring; in Edmonton, in July and August; in Enfield, in June and December, it was necessary to close the schools: in Finchley the same steps were taken; in Hampton; in Hampton Wick in November certain schools were closed; in Hendon (Urban) in June, certain schools were closed; in Uxbridge, in July and August, and again in November, when the schools were closed in consequence; and in Willesden.

WHOOPING COUGH.

Whooping cough is only compulsorily notifiable in Hendon (Urban) District, but mention is made of excessive prevalence of the disease in many Districts during the early part of the year.

ISOLATION.

In the accompanying Table 6, an endeavour has been made to extract from the Reports as much information as was possible in reference to Isolation Hospitals. It can be definitely said that one-half of the Sanitary Authorities in the County do not possess hospital accommodation for infectious diseases of any kind. Of the other half, one Authority (Hendon Rural) is considering the matter, and another (Harrow) is erecting a building; of the remaining thirteen, three use a joint hospital and the other ten have presumably separate structures. It is not possible to record precisely and completely the conditions prevailing, for this purpose a special enquiry would require to be made, as the information obtained has in most cases been laboriously dug out of the body of the Reports.

TABLE 6.
ADMINISTRATIVE COUNTY OF MIDDLESEX.

Sanitary Districts.	Isolation Hospital?	When opened?	Where situated?	No. of Wards.	No. of Beds.	Disinfecting Chamber?	Where situated?	Type of Chamber?
URBAN.								
Acton ..	No							
Brentford ..	Yes	Jan. 1892	..	..	10			
Chiswick ..	No							
Ealing ..	Yes	..	..	Small				
Edmonton ..	No							
Enfield ..	Yes	Dec., 1891	World's End	..	16	..	..	Steam High pressure steam
Finchley ..	Yes	April, 1889	..	..	..	Use Hampstead chamber	..	
Friern Barnet ..	No							
Hampton ..	Yes							
Hampton Wick ..	No							
Hanwell ..	No							
Harrow ..	Building							
Hendon ..	Yes							
Heston and Isleworth	Yes	.. {	Dockwell Lane, Heston					

The Districts provided with hospital accommodation have admitted to their hospitals the number and class of cases shown in the following table:—

Sanitary Districts.					Smallpox.	Scarlatina.	Diphtheria.	Membranous Group.	Typhus Fever.	Enteric Fever.	Total.
Brentford	..	..	..	..	75	2	..	2	..	79
Ealing	..	..	..	..	66	5	..	..	2	73
Enfield	..	..	..	..	92	1	..	..	..	93
Finchley	..	..	..	..	36	..	..	..	..	36
Hampton	..	..	..	..	..	1	..	..	..	1?
Hendon	..	..	..	..	23	..	..	..	..	23
Heston and Isleworth	..	..	..	..	54	..	..	..	3	57
Hornsey	..	..	..	2	81	2	..	1	..	86
*Southall-Norwood	..	..	..	..	9	2	..	..	..	11
Twickenham	..	..	..	..	28	..	..	..	..	28
*Uxbridge (Urban)	..	..	..	..	26	13	..	..	2	41
Willesden (part of year)	..	..	..	..	..	..	..	..	..	38
*Uxbridge (Rural)	..	..	..	..	35	10	..	..	7	52

* Joint Hospital.

The information in respect of Hampton District is evidently incomplete. Willesden has only been in occupation of the hospital for part of the year, since August, and details of admission were not ascertainable. From Enfield the smallpox cases were taken to the Smallpox Hospital at Highgate, and the enteric fever cases were treated in a cottage hospital. The cases shown in the table were treated in a temporary building, but Dr. Ridge states that the permanent building will provide accommodation for the separate treatment of scarlatina, diphtheria, and enteric fever cases, both male and female.

In most of the Reports of Districts without isolation hospitals, the Medical Officers of Health call attention to the necessity for providing such accommodation.

Mr. Prouse (Acton) speaking of the outbreak of small-pox, says, "such an epidemic should remind the Board of the urgent necessity which arises for the construction of an isolation hospital. With a slight outbreak as in the present case, some considerable difficulty was found in finding a Metropolitan Hospital to receive the patients, and at one time as much as £20 per week was paid for the maintenance of such patients. . ."

Mr. Hugh Stott (Friern Barnet), referring to cases of infectious disease, says "applications were made to me for removal to hospital so that the parents could go out to work; but as there is no provision for isolation, I could not assist them, and while the cases were at home ill, the parents had to give up work, and obtain relief from the Guardians." Three applications of this kind were made.

DISINFECTION.

No mention is made in any of the Reports of the provision of temporary shelter, during disinfection, for persons living in one or two rooms. In Table 6 a few facts have been extracted in reference to disinfecting apparatus, from which it appears that some six Authorities have the use of disinfecting chambers. In Table C (IV), Part III, the number of rooms fumigated and cleansed, and of articles disinfected or destroyed, so far as could be ascertained have been tabulated, some 12 Districts only having furnished records upon this subject.

VACCINATION.

No account of vaccination is given in any of the Reports. It is to be regretted that a subject so eminently pertaining to the prevention of disease should be divorced from the cognizance of Sanitary Authorities by the Vaccination Acts.

CHAPTER IV.—SANITATION.

SANITARY WORK GENERALLY.

In a County such as Middlesex, much variety exists in the sanitary works of the Local Authorities, depending as they must do upon the urban, sub-urban, semi-rural, or rural characters of the Districts. Table C, 1, 2, 3, and 4, in Part III, has purposely been made as full as possible, in order to embrace these varying characters, and incidentally to show, at the same time, the rapid transition that is taking place in the character of many of the areas. This transition from rural through several stages to urban conditions that is taking place in the County, makes it necessary to bear in mind that the stage of development to which a District may have arrived must be taken into consideration before definitely concluding that any particular sanitary work should be found amongst the records of the District. Another reason for making the table full is, that no two Reports state the sanitary work accomplished in the same manner, and, unless extracts are made and recorded in detail, the result would produce a misleading impression. Furthermore, the various heads and subheads call to mind the subjects upon which information is to be sought as to the sanitation of a District, and may prove of service to the Local Authorities as well as to the County Council. Much time and labour has been spent in drawing up the table, and in classifying the subjects in such a form as to be comprehensive and readily comparable, as well as in extracting the details from the Reports of the Districts, and classifying them. It will be noted that seven Districts supply no Returns of sanitary work, and that a few others only supply scanty Returns, whereas, in a few cases, as in

Wood Green, the record is not only complete, but the same work appears to be stated several times over in different tabular forms, which is apt to lead to an excessive estimate.

INSPECTIONS.

The initial causes that give rise to inspections in a District are (1) the complaints received ; (2) the cases of infectious disease notified ; (3) the houses inspected from house-to-house ; and (4) the premises periodically inspected.

Complaints as a matter of duty take precedence, and require prompt inspection.

Infectious Diseases notified demand equally prompt enquiry in order to discover the cause of disease, and to remedy insanitary conditions that may give rise to the disease or to other diseases. As Dr. James Turle (Finchley) says, "the Sanitary Inspector has well maintained the practice of at once carefully inspecting every house in which cases of serious infectious disease have occurred. This has not been done from any notion that all such diseases are caused by insanitary conditions, such as defective drains, etc. ; but wherever such conditions exist, disease of the kind referred to is far more likely to run an unfavourable and perhaps fatal course ; and the benefits derived from their removal would necessarily not be limited to the particular illness by which attention has been drawn to them."

House-to-house inspections may be confined to particular localities, or be extended to the whole District, in any case such inspections are recognised as the duty of Sanitary Authorities, and as an effectual means of remedying insanitary conditions. This does not appear to be sufficiently recognised, for Mr. Prouse (Acton), says "I can

only express my surprise that . . . the Board does not insist upon a house-to-house inspection " for the purpose of discovering sanitary defects. And again, Dr. Ridge (Enfield), considers that "it is highly desirable that a house-to-house inspection should be made, as there can be no doubt from our experience of casual inspections that sanitary defects exist in large numbers," and elsewhere he is of opinion that "the size of the Parish, and the great extension of building and population is such that it is perfectly impossible for one Sanitary Inspector to do all that is required, he is scarcely able to attend to matters brought specially under his notice."

In a few instances more attention is paid to this class of inspection, for instance, in Chiswick (Mr. F. C. Dodsworth), "during the past year 'the house-to-house inspection' has been energetically carried on (although our sanitary staff has been reduced), and I hope to be in a position to report in the course of a few months that it has been completed." In a similar strain Dr. Tyndale Watson (Tottenham), says "considerable house-to-house inspection has been carried out recently, which I hope will have a most salutary effect."

Premises periodically inspected, or that should be periodically inspected, embrace certain classes of dwellings and trade premises, and especially all registered and licensed premises. The periodical intervals that should elapse between the visits depend upon the class of premises, but it appears that definite intervals are rarely fixed, so that it is difficult to ascertain the amount of supervision exercised.

Staff.—Very much depends upon the amount of staff available for sanitary work.

In some Districts, it is reported that insufficiency of staff renders it impossible to do all that is required; instances of this will be found in the Summary of Reports.

Much also depends upon the manner in which the staff execute and record the work.

In the case of Edmonton (Dr. C. D. Green), the table does not represent the whole work done, as the Sanitary Inspector resigned his office in September, and some interruption in the sanitary work occurred in consequence. The retiring Inspector left no tabular statement of the work he had done."

Clerical Work.—The amount of clerical work falling upon Medical Officers of Health, and Inspectors of Nuisances may often be considerable. As much of the time of the executive staff is taken up by in-door work, by so much is the time available for out-door work curtailed. In one or two of the Reports attention is called to the amount of clerical work required. It would appear that clerical assistance in some instances would strengthen the sanitary staff by freeing time that could be devoted to more complete inspection.

DWELLINGS.

Dwelling-houses.—No mention is made in any of the Reports of the existence of any Building bye-laws, or of the enforcement of any regulations to be observed in the construction of new buildings, except that in Enfield (Dr. J. J. Ridge) "provision has been made by a new bye-law for the inspection and certification of all new houses before occupation is allowed." It is urged that "this has been greatly needed, and should be rigidly enforced."

In dealing with unhealthy property, Mr. Dwight Morris (Staines Rural), recommends that "the only satisfactory means is to prevent persons building such death-traps, and this would be met by adopting a code of bye-laws on the basis of that issued by the Local Government Board Model. This would not only improve the rateable value of the District, but greatly enhance the salutary condition of your inhabitants The rapid extension of buildings is very evident all throughout your District. Building Society appropriations are largely utilised."

Housing of the Working Classes Act.—This Act has been put in force in a few Districts, but in some instances it is difficult to differentiate in the Reports between houses closed upon the Representation of the Medical Officer of Health, followed by the notice of the Sanitary Authority, the procedure necessary under the Housing of the Working Classes Act, and houses closed after disobedience to the notice of a Sanitary Authority without a previous Representation of the Medical Officer, the procedure under the Public Health Act alone. The former procedure may lead to demolition, the latter stops short of this. Although as seen by Table C (I) a number of houses were closed as unfit for human habitation, demolition was only carried out in Willesden, and the six cottages there were demolished by the owner. Cottages appear to be the class of dwelling-houses that give rise to most insanitary conditions.

Mr. Dwight Morris (Staines Rural) is of opinion that "by paying a little more personal attention to their property, owners would considerably increase the value of the same, the health of their tenants, and the healthiness of the District generally. This is particularly applicable to the cottage property in your District."

Dr. Campbell Gowan (Hendon Rural), in speaking of the Housing of the Working Classes Act, says, "two sets of apparently opposing interests, yet having much in common, have to be considered. The one comprises the landlords, rich and poor, mostly the latter; the other is formed by a large proportion of the working classes, for whose benefit the Act was framed. In my Report for 1891 I stated that (roughly speaking) one quarter of the small cottages are unfit for habitation. This, unhappily, is but too true, not only of our District but of hundreds of others, and the difficulty lies in suggesting a remedy which, while not bearing unduly on those whose limited means are invested in cottage property, shall yet provide habitable houses for the poor. . . . Many of these 'rookeries' are so hopelessly bad that they must come down . . . new cottages must be built."

Houses Let in separate Dwellings, Tenements, or Lodgings.—This class of houses is less frequently mentioned in the Reports than that of cottages. As might be expected this class is more to be met with in Districts where larger houses constructed for one family have become occupied by more than one, and sublet in tenements. This process is more common in old Districts than in new, although it is apparently commencing, for in Willesden (Dr. D. S. Skinner) "Bye-laws have been approved and sanctioned by the Local Government Board, and notices were given that they would come into force on January 1st, 1893."

In Heston and Isleworth three houses are reported as registered under bye-laws, and one contravention took place.

Common Lodging Houses.—Information in reference to

common lodging houses is scanty. In Brentford (Urban) these houses had considerable attention paid to them, due no doubt to the outbreak of typhus fever in one of them, and 145 inspections were made of the 10 houses registered in the District. In Heston and Isleworth the two houses registered are periodically inspected. In Tottenham 76 inspections were made, but it is not recorded how many houses are registered.

Canal Boats used as Dwellings.—The Sanitary Authorities of two Districts in the County are Registration Authorities under the Canal Boats Acts, but whereas Brentford (Urban) has 207 boats on the register, Southall-Norwood has none. Inspection of these boats was actively carried on in these Districts, but nothing appears to have been done elsewhere upon the canals.

Movable Dwellings.—Considerable trouble arises from nuisances caused by caravans and gipsy encampments. In Wood Green no less than 27 vans were removed, from Acton 13, Tottenham 9, and Teddington 2. Although the Public Health Acts, and local bye-laws as to nuisances where they are in force, give a certain amount of power in suppressing such nuisances, the power is insufficient in most cases.

Mr. Dwight Morris (Staines Rural) says: "It is to be hoped the County Council may see the necessity of issuing bye-laws for the better regulation of these gipsy encampments. A more dangerous and unhealthy condition cannot be conceived than collections of this class of people, and especially when situated on the worst possible site, as on Ashford Common."

I understand that the County Council has already

passed bye-laws for the control of movable dwellings, such bye-laws being made applicable, upon the advice of the Secretary of State, to so much of the County as is situate within certain Sanitary Districts, to the following effect:—

1. An owner of land shall not cause or suffer any such land, within 100 yards of any street, or of any dwelling house, to be occupied so as to cause annoyance, injury, or disturbance to residents in the neighbourhood, by any tent-dweller, squatter, gipsy, or any other person dwelling in a tent, or van, or other similar structure.

2. A tent-dweller, squatter, gipsy, or other person shall not use as a dwelling-place, so as to cause annoyance, injury, or disturbance to residents in the neighbourhood, any tent, or van, or other similar structure, placed on any land situated within 100 yards of any street, or of any dwelling-place.

Penalties.—Every person who shall offend against either of the foregoing bye-laws shall be liable for every such offence to a penalty of not exceeding five pounds.

WATER SUPPLY AND WATER SERVICE.

Sources.—A proper knowledge of the sources and water supply of the County and of its component Districts can only be obtained by a complete and thorough enquiry and Report. This would appear most desirable in the presence of threatened cholera. Such information as can be gathered from Annual Reports, is altogether too meagre to form any idea of the condition of the water supplies, especially as to the number of shallow wells existing.

Wells.—That shallow wells exist in large numbers cannot be doubted, for Mr. Albert Curtis says, in Staines Urban District, “hardly a meeting of the Board occurs without some complaints as to wells,” and, “if the cesspool system is still to be carried out, it is obvious that surface wells should be discontinued.”

In most of the Reports mention is made of polluted shallow wells, and during the year a number were closed, as may be seen on reference to Table C (II). The record probably does not include the whole of the wells closed, as in some Districts mention is made of the closure of wells, but the number is not stated.

Waterworks.—The County of Middlesex has a number of Water Companies within its borders, and the intakes of several of the Companies supplying London are situated in its Thames riverside Districts. So far as can be gathered from the Reports, the Grand Junction Company supplies Hanwell, Heston and Isleworth, and Teddington; the West Middlesex Company, Chiswick and Willesden; the New River Company, South Hornsey; The South-Western Suburban Company, Southall-Norwood, Staines Urban, and probably Staines Rural; the Colne Valley Company, Harrow; the Barnet Water Company, Friern Barnet; South Mimms is supplied by both the last mentioned; Enfield and Uxbridge appear to be spoken of as possessing their own works. The rural Districts are doubtless in the worst position, especially some of the Parishes in Uxbridge Rural. A properly drawn map of the County and Districts, showing the various areas of supply, should be in the possession of your Council; this, supplemented by the percentage of houses in each District supplied from the mains, would complete the necessary and fundamental knowledge requisite under this head.

Constant Supply.—In a few Districts the supply from mains are sufficiently numerous, and have reached such a stage as to lead to the demand for a constant supply. For instance, Mr. Dodsworth (Chiswick) says: “I consider that every house in the District should be provided with a ‘constant supply;’ complaints are frequently made of a scanty and inadequate quantity.”

In complying with this demand, the power of the works to supply water at constant high pressure to the uppermost stories of the highest houses in the District, must be considered in some cases. A constant high pressure supply avoids many possible evils, the back suction caused by intermittently stopping the flow, and the dangers attending the use of cisterns, being not the least of these. It is a great advantage to the householder to be able to remove the domestic draw tap from the cistern and fix it upon the house main. Or, as Dr. Fletcher Little (Harrow) puts it: “The cottager who draws his water from a standpipe in the yard is better off than the householder who only inspects and cleans his cisterns two or three times a year. Many cases of chronic diarrhoea, sore throats, and general ill-health are caused by the use of such impure water. The recovery of such patients is often attributed to *change of air*, when it should be attributed to *change of water*.”

DRAINAGE AND SEWERAGE.

Privies and Cesspits not only give rise to nuisances in the storage and removal of excreta, but also tend to pollute wells, especially those sunk in pervious soils of certain parts of the County. Mr. C. Roberts (Uxbridge Rural) calls attention to the necessity “more especially of the drainage of Yiewsley and West Drayton, as a good system will do

away with the great danger of cesspits polluting wells." These pits do not appear to be confined to rural Districts, for in Southall-Norwood 21 waterclosets were substituted for such receptacles, and no doubt other Urban Districts possess many of these sunken pits. Whether any measures have been adopted for abolishing them and substituting above ground receptacles, or of substituting portable receptacles for fixed, partial measures but effectual remedies for the danger of well pollution, is not stated in any of the Reports.

In any case the slop and waste waters must be discharged, and some form of drainage, however primitive, must exist, frequently that form which leads to the fouling of ditches and brooks, of which complaint is made in several Districts. It is this fouling that leads ultimately to the pollution of the larger streams, the only means of averting this being the construction of proper drainage and sewerage systems, and the disposal of sewage in an innocuous manner.

Water-closets.—The installation of water-closets for a water-carriage system before that of a high pressure water-supply system has led to many troubles arising from insufficient flushing. Mr. Hugh Stott (Friern Barnet) reports that there are still houses without a proper supply of water to the closets, "the houses being supplied with water from wells, and the closets hand-flushed, which in my opinion is not an efficient water supply." In certain parts of England these troubles have in some measure been overcome by constructing the closets so as to receive and store the slop and waste house-waters, and to discharge them when required, and in such a manner as to secure a more or

less adequate flush. But unless water is at hand and supplied readily, the chances are greatly against it being used to properly flush the closet. Considerable attention appears to have been paid in many Districts to the remedying of nuisances arising from closets.

Drains.—Considerable attention also appears to have been paid to the condition of house-drains, necessarily more in the Urban than in the Rural Districts. No mention is made of any bye-laws or regulations, adopted for the purpose of preventing the improper construction or repair of drainage.

Cesspools.—Laying a supply of water to a District by means of mains necessarily leads to a greater consumption of water, and as surely leads to the necessity of a proper drainage and sewerage system. Cesspools will not avert this necessity, they will continue to catch and retain the solids until they are full, and then the state described by Mr. Charles Roberts (Uxbridge Rural) will set in. He found “a long line of cottages in Old Farm Road, on several occasions, in a deplorable condition, the cesspits full, the drains blocked and liquid filth overflowing, and with no proper outlet.” Even when not full the cesspool is still a danger, both on account of what it retains in the proximity of the dwelling, and what it allows to pass. If the overflow be into a proper sewer, there is no necessity for the cesspool; if there be no proper sewer then the excess liquid, which contains the principal manurial and polluting matters, must either percolate away to pollute the soil and wells in the neighbourhood, or else flow into and pollute the ditches and brooks.

In Hampton Wick (Dr. Gunther) “there are probably 5,000 cesspools in the District, and each of them

impregnates the surrounding soil with its contents. In consequence of the continuous pumping which took place during the laying of the drain pipes, the sub-soil water was diverted from its former course towards the pumping station. This artificially created current sucked the loose soil contents of cesspools into wells, and contaminated water which was formerly free from organic matter." . . . "We must all regret that no great progress was made during last year in the sewerage of the District."

Of Enfield (Dr. J. J. Ridge) it is reported that "the dangerous condition of the drainage of the houses in Goat Road has received attention, and has been temporarily averted by the constant emptying of the cesspools; but the construction of a proper sewer there is a matter of urgency." This District has a high typhoid rate.

Sewers.—The construction and maintenance of efficient sewers are not without their difficulties, depending much upon the soil and upon the levels. In endeavouring to establish a system of sewers, the Local Board of Staines (Mr. Albert Curtis, Medical Officer of Health) "are met with the great difficulty of their construction, owing to the low levels, the water-logged condition of the subsoil, and the enormous expense." Mr. Hawksley characterised it as "the most peculiar and the most exceptional, as well as the most difficult, and I may add, relatively, the most expensive of all the cases of town drainage I have ever had occasion to consider." And when constructed, the maintenance of the sewers in such a condition as to avoid nuisance requires no little attention. The nuisance arises generally from deposit, sluggish flow, and insufficient ventilation.

Mr. C. A. Patten (Ealing) observes that "a few years

ago, complaints regarding sewer emanations were of almost daily occurrence, but they have year by year become less frequent. That result, I think, proves the great benefit conferred by the more free and systematic flushing of the main lines of sewers."

In addition to periodical flushing, especially in hot weather, ample ventilation is requisite to aerate and to dilute the mephitic gases formed.

Mr. Prouse (Acton), says, "irrespective of the serious injury to health which may arise from the neglect of proper and adequate flushing, it is not right that ratepayers should be unable to pass from their houses along the street without being poisoned by the effluvia from the ventilators of the sewers." In a number of districts the erection of sewer ventilating shafts is proceeding with material advantage, although the number erected is in most cases not mentioned. In some instances, as in Finchley (Dr. Turle), attention is called to the difficulty of selecting situations for these shafts so that they may be placed sufficiently distant from windows. In Harrow (Dr. Fletcher Little) experiments are being carried on for the purpose of ascertaining the best methods of providing for the removal of sewer gas.

The dependence of a contributory District upon the sewers of a principal Authority is illustrated by Dr. Clothier (Hornsey) in the case of storm-flooding in Stroud Green:—"I am officially informed that the initial cause of the flooding is the insufficiency of the main outfall sewers of the London County Council, but I understand that the Council are taking active measures to so alter and enlarge their main sewers as to prevent the recurrence of this

nuisance, which is absolutely beyond the power of the tributary Districts to remedy."

Sewage Disposal presents innumerable difficulties, but various processes appear to be in vogue in the County. In some Districts the disposal of sewage is still a matter for serious consideration. For instance, it is remarked by Dr. Wentworth Tyndale (Hampton) that, "considering the number of years the sewage of Hampton has been cut off from the Thames, and, as a consequence, been bottled up in cesspools, and frequently overflowing in different places, it is a matter of surprise to me that we escape year by year a serious outbreak of zymotic disease."

The references in the Annual Reports are insufficient for the purpose of presenting a complete account of the conditions prevailing throughout the County, a special enquiry and Report would be necessary in that event, but mention is made of sewage works in certain instances.

In Ealing (Mr. C. A. Patten) it is stated that the treatment of sewage is carried on successfully at the northern farm at Perivale and at the southern sewage works. In Enfield (Dr. J. J. Ridge) "the sewage farm has been enlarged." In Finchley (Dr. J. Turle) thirty-four acres of pasture land have been added to the sewage farm and the works have been extended and improved. In this case the process is described, namely, precipitation by lime and sulphate of ammonia, pressing the sludge into cake, or pumping it on to land, and irrigating the supernatant liquid over prepared beds and land. In Friern Barnet (Mr. Hugh Stott) the effluent is spoken of as excellent, and the filter beds as efficient. In Hendon (Mr. F. W. Andrews) the sewage is treated by the International Sewage Purification Company.

In Willemsden (Dr. D. S. Skinner) one-third of the District is served by a sewage farm, the other two-thirds drain into the Metropolitan system of sewers. In South Mimms (Mr. W. Griggen) the village of South Mimms has efficient sewers, but endeavours are being made to obtain a site for the treatment of the sewage of Potter's Bar.

River Pollution.—The want of proper means for the effectual removal and disposal of sewage, contributes to the pollution of rivers and streams. This is brought about not only by the direct discharge of pollution into the rivers, but also, and in some cases mainly, by the pollution of the ditches and brooks near the sources of the river.

Mr. C. Roberts (Uxbridge Rural) reports: "the drainage of Eastcote, and the condition of ditches in this Parish, have been so frequently brought to the knowledge of your Board that it is unnecessary for me to remark upon them on this occasion, except to express a hope that before long a system of drainage may be adopted which will do away with existing evils." The brook of this drainage area from Eastcote, flows into Fray's River and the Colne.

The manner in which the source of pollution is referred ever higher and higher up a river is exemplified in the case of the Brent. Dr. Graves Burton (Hanwell) says of the state of the River Brent:—"This river has become very filthy of late years, and no doubt the offensive odours given off from it are injurious to health. The cause, however, does not arise in this District, but is owing to the pollution which takes place higher up the stream." This refers to the Brentford Rural Sanitary District.

Of the Brentford Rural District he reports thus:—

During the year many complaints were made of the state of the River Brent. I inspected the course of the river in this District, and ascertained that the filthy state of the river was due to the pollution which occurred in localities higher up the stream, and that therefore before the portion of the river which runs through this District could be purified, steps would have to be taken by the other Authorities. This, I believe, is being done, and action is being taken by your Authority to prevent any pollution taking place in this District."

Dr. D. S. Skinner (Willesden) reports that "the works which were done by the Board last year have had beneficial results in obviating so much stagnation in the pools" of the Brent.

This matter being already under the attention of your Council is doubtless receiving due consideration.

The pollution of the River Tees by the excremental and other refuse of towns and villages within its drainage area, and the disastrous results to townships situated in the Tees Valley, recently described in a graphic and convincing manner by Dr. Barry, in the Supplements to the 20th and 21st Reports of the Local Government Board, bring vividly to mind the dangers that beset the pollution of streams.

For the purpose of reference, it may be of interest to enumerate the principal streams in the Administrative County:—

RIVER THAMES:—

RIVER BRENT: Silk Stream and Dollis Brook.

RIVER CRANE: Yeading Brook, Duke of Northumberland's River, and Queen's or Cardinal's River.

RIVER COLNE: Mimshall Brook, Wyradisbury River, Colne Brook, Fray's River, and Shire Ditch.

Grand Junction Canal.

RIVER LEA: River Lea Navigation Canal, Cuffley Brook, and Pymme's Brook.

New River.

The Registrar-General, in the Census of 1891, gives the relative proportion of land and water in each of the Civil Parishes in the County, as set forth in Table 7.

TABLE 7.

ADMINISTRATIVE COUNTY OF MIDDLESEX—CENSUS, 1891.

Registration Counties, Districts, and Sub-Districts, and Civil Parishes.	Area in Statute Acres.				
	Land.	Water.	Total.	Tidal water additional.	Foreshore additional.
MIDDLESEX (Part of).					
STAINES—					
<i>Sunbury—</i>					
Laleham	1,270	31	1,301	—	—
Littleton	1,019	19	1,038	—	—
Shepperton	1,432	59	1,491	—	—
Sunbury	2,623	36	2,659	—	—
Hanworth	1,353	20	1,373	—	—
Feltham	1,777	13	1,790	—	—
Ashford.. .. .	1,392	10	1,402	—	—
<i>Staines—</i>					
Staines	1,769	74	1,843	—	—
Stanwell	3,949	52	3,999	—	—
East Bedfont	1,909	17	1,926	—	—
Cranford	726	11	737	—	—
Harlington	1,456	9	1,465	—	—
Harmondsworth	3,264	43	3,307	—	—
UXBRIDGE—					
<i>Hillingdon—</i>					
West Drayton	857	21	878	—	—
Cowley	266	6	272	—	—
Hillingdon	4,785	100	4,885	—	—
<i>Uxbridge—</i>					
Uxbridge	83	4	87	—	—
Harefield	4,543	78	4,621	—	—
Ickenham	1,460	4	1,464	—	—
<i>Hayes—</i>					
Ruislip	6,528	57	6,585	—	—
Northolt	2,167	13	2,180	—	—
Hayes	3,278	33	3,311	—	—
Southall-Norwood	2,412	49	2,461	—	—

TABLE 7—*continued.*
CENSUS, 1891—*continued.*

Registration Counties, Districts, and Sub-Districts, and Civil Parishes.	Area in Statute Acres.				
	Land.	Water.	Total.	Tidal water additional.	Foreshore additional.
BRENTFORD—					
<i>Isleworth—</i>					
Heston	3,787	36	3,823	—	—
Isleworth	3,091	53	3,144	28	14
<i>Twickenham—</i>					
Twickenham	2,383	32	2,415	57	5
<i>Brentford—</i>					
Twyford Abbey	275	6	281	—	—
New Brentford	205	11	216	2	2
Ealing	3,776	45	3,821	7	16
<i>Chiswick—</i>					
Chiswick	1,256	9	1,245	61	34
<i>Acton—</i>					
Acton	2,297	8	2,305	—	—
Hanwell	1,054	13	1,067	—	—
Greenford	2,111	16	2,127	—	—
Perivale	624	9	633	—	—
LONDON—					
<i>Harrow—</i>					
Harrow-on-the-hill	9,985	42	10,027	—	—
Pinner	3,772	10	3,782	—	—
<i>Edgware—</i>					
Great Stanmore	1,470	14	1,484	—	—
Little Stanmore	1,572	19	1,591	—	—
Edgware	2,089	1	2,090	—	—
Kingsbury	1,808	21	1,829	—	—
<i>Willesden—</i>					
Willesden	4,302	81	4,383	—	—

TABLE 7—*continued.*CENSUS, 1891—*continued.*

Registration Counties, Districts, and Sub-Districts, and Civil Parishes.	Area in Statute Acres.				
	Land.	Water.	Total.	Tidal water additional.	Foreshore additional.
<i>HENDON—continued—</i>					
<i>Hendon—</i>					
Hendon.. .. .	8,243	139	8,382	—	—
<i>BARNET (part of)—</i>					
<i>South Mimms (part of)—</i>					
South Mimms (part in Middlesex) ..	6,269	32	6,301	—	—
<i>Finchley—</i>					
Friern Barnet	1,303	1	1,304	—	—
Finchley	3,371	13	3,384	—	—
<i>EDMONTON (part of)—</i>					
<i>Hornsey—</i>					
Hornsey	3,012	27	3,039	—	—
<i>Tottenham—</i>					
Tottenham	4,580	62	4,642	—	—
<i>Edmonton—</i>					
Edmonton	7,403	86	7,489	—	—
<i>Enfield (part of)—</i>					
Enfield (part in Middlesex)	12,480	122	12,602	—	—
 SURREY (Part of).					
<i>KINGSTON (part of)—</i>					
<i>Hampton—</i>					
Hampton	1,974	62	2,036	—	—
Hampton Wick	1,235	80	1,315	—	—
Teddington	1,196	18	1,214	8	—

SCHOOLS.

Excepting the instances when scarlatina and measles prevailed, and the schools were, as already mentioned, closed, with a view to checking the epidemics, no special attention appears to be paid to these institutions in most of the Districts. But in Acton and in South Hornsey, respectively, 14 inspections were made during the year, and some regular attention seems to be directed to schools. There is no doubt that they should come within the purview of Sanitary Authorities.

WORKSHOPS AND WORKPLACES.

Similarly to schools, small attention is paid to workshops, and workplaces generally, excepting in Willesden and Tottenham; in the former five of such premises are noted, and in the latter 112 visits were paid to workplaces. Probably in most Districts the number of workshops is few, and no difficulty should be experienced in carrying out the inspection of such places. The Secretary of State and the Local Government Board have urged the desirability for frequent inspection of workplaces now that the duty has been cast upon the officers of Sanitary Authorities instead of upon the Inspectors of Factories. In the manufacture of articles of wearing apparel, and of furniture and upholstery, there must be a certain number of outworkers in most Districts, and their workplaces can be readily ascertained from the lists that it is now compulsory on every occupier and contractor to keep, in accordance with the Order of the Secretary of State, set out below.

(No. 44.)

FACTORY AND WORKSHOP ACTS, 1878-1891.

(Gazetted 4th November, 1892.)

*Order of Secretary of State requiring Occupiers of certain
Factories and Workshops to keep Lists of Outworkers.*

WHEREAS by Section 27 (1) of the Factory and Workshop Act, 1891, it is enacted that :—

“The occupier of every factory and workshop (including any workshop conducted on the system of not including any child, young person, or woman therein) and every contractor employed by any such occupier in the business of the factory or workshop shall if so required by the Secretary of State by an Order made in accordance with Section 65 of the principal Act, and subject to any exceptions mentioned in the Order, keep in the prescribed form and with the prescribed particulars lists showing the names of all persons directly employed by him, either as workman or as contractor, in the business of the factory or workshop outside the factory or workshop, and the places where they are employed, and every such list shall be open to inspection by any inspector under the principal Act or by any officer of a Sanitary Authority.”

Now I, the Right Honourable Herbert Henry Asquith, one of Her Majesty's Principal Secretaries of State, by this Order, made under Section 65 of the Factory and Workshop Act, 1878, and Section 27 of the Factory and Workshop Act, 1891, require the occupier of every factory and workshop (including any workshop conducted on the system of not employing any child, young person, or woman therein), and every contractor employed by any such occupier in any of the businesses mentioned in the schedule hereunder, to keep in the form and with the particulars hereunder prescribed, lists showing the names of all persons directly employed by him, either as workman or as contractor, in the said business outside the factory or workshop, and the places where they are employed, and every such list shall be open to inspection by any inspector under the Factory and Workshop Act, 1878, or by any officer of a Sanitary Authority.”

The order of the 18th July, 1892, under the above recited enactments, is hereby revoked.

This order shall come into effect on the twentieth day of November, 1892, and shall continue in force until revoked.

WHITEHALL,
31st October, 1892.

HERBERT H. ASQUITH.

SCHEDULE.

THE MANUFACTURE OF ARTICLES OF WEARING APPAREL,
THE MANUFACTURE OF ELECTRO-PLATE.

Out-Workers.

Form for use of Occupier.

Form Prescribed by the Secretary of State.

FACTORY AND WORKSHOP ACT, 54 & 55 Vict., c. 75, s. 27.

(OUT-WORKERS.)

Address of Factory or Workshop
 Name of Occupier of Factory or Workshop
 Business Carried on
 Names of persons employed by the OCCUPIER outside the Factory
 (or Workshop), in the business of the Factory (or Workshop),
 and places where they are employed, viz.:—

A.—Person so employed as workmen.

Christian and Surname.

Place where employed.

B.—Persons so employed as Contractors.

Christian and Surname.

Place where employed.

NOTE.—In order that these lists may be correct lists of persons employed at any given time, it will be necessary that the name of any person newly taken into employment should be immediately entered, and the name of any person ceasing to be employed should be immediately struck through.

CABINET AND FURNITURE MAKING AND UPHOLSTERY WORK,
THE MANUFACTURE OF PILES.

Out-Workers.

Form for use of Contractor.

Form Prescribed by the Secretary of State.

FACTORY AND WORKSHOP ACT, 54 & 55 Vict., c. 75, s. 27.

(OUT-WORKERS.)

Address of Factory or Workshop
 Name of Occupier of Factory or Workshop
 Business carried on
 Names of persons who are employed outside the Factory (or Work-
 shop), in the business of the Factory (or Workshop), by A. B.
 a CONTRACTOR with the Occupier
 and places where they are employed, viz.:—

A.—Persons so employed as workmen.

Christian and Surname.

Place where employed.

B.—Persons so employed as Contractors.

Christian and Surname.

Place where employed.

NOTE.—In order that these lists may be correct lists of persons employed at any given time, it will be necessary that the name of any person newly taken into employment should be immediately entered, and the name of any person ceasing to be employed should be immediately struck out.

Laundries.—These are specially mentioned in the Factory and Workshops Act, 1891. Only in Willesden does any systematic inspection of laundries appear to have been made. In this District there are 147 premises of this kind, and Dr. Skinner remarks that “with the exception of four they are on a small scale, employing under 12 hands.” But it may be observed that the larger laundries are generally better constructed and better conducted than the smaller. The 60 visits recorded in Hendon were to “wash-houses,” and probably refer to domestic wash-houses attached to dwelling-houses, of which they really form part.

Bakehouses.—As will be seen on reference to Table C (III) in four cases the number of bakehouses in the District is stated, and in five Districts the number of inspections made are definitely stated. In other cases whilst reference is made to “periodical” inspections, neither the interval nor the number of inspections is stated. It is difficult to form any idea of the amount of supervision exercised in the absence of any definite statement, and it would be very desirable that the periodical intervals should be stated, and adhered to, for the inspection not only of bakehouses but of all premises that require periodical inspection. For, as Mr. Marston Clark (Twickenham) says, “with regard to bakehouses, it is only by repeated visitations, that the necessary line-whiting, white-washing, cleansing, etc., is carried out, as in many instances the work would not be done by the occupiers unless they were closely supervised.”

SLAUGHTER-HOUSES.

Similar remarks apply to slaughter-houses as to bakehouses, but the supervision appears to be better carried out and recorded in this instance.

COW-SHEDS, DAIRIES, AND MILKSHOPS.

In some instances these are classed together, in others separately. It is true they fall equally under the Dairies, Cowsheds, and Milkshops Order, made under the Contagious Diseases Animals Act, but it is more convenient to class the cow-sheds, where animals producing the milk are kept, separately from the dairies and milkshops where the milk is stored, manipulated, or sold. The table shows a considerable amount of work done in supervising milk supplies, although the record is not complete.

UN SOUND FOOD.

In Acton a diseased cow, condemned by the County Veterinary Surgeon, was seized, and also five parcels of unsound food. In Brentford two, and in Tottenham 20 articles or parcels of unfit food were seized. In other Districts mention is also made of food being inspected as to soundness.

ADULTERATED FOOD.

Southall-Norwood (Mr. J. D. Windle) is the only District that reports the number of samples of food taken (29) and the number found adulterated (3). Although no return as to numbers is available, Mr. Dodsworth (Acton) reports that "the Sanitary Inspector having been appointed by your Board also Inspector under this Act [Sale of Food and Drugs Act], several substantial convictions have through him been obtained against vendors of milk during the past year." Possibly the fact that many Districts have not appointed Inspectors under the Sale of Food and Drugs Act may be the reason for the absence of reference to this subject.

CONTAGIOUS DISEASES OF ANIMALS.

Under the Contagious Diseases (Animals) Acts, Mr. Marston Clark (Twickenham) "received declarations from the Inspector under the Act of Swine Fever existing in two piggeries. The affected animals were in both cases destroyed." The number of animals is not stated. This is the only reference in the Reports to any action under these Acts.

NUISANCES.

In Table C (IV) the number of nuisances abated are classified under various heads, and it is scarcely necessary to enter into further details as to these. One quotation is interesting. Under the head of pig-keeping, Mr. Dwight Morris (Staines Rural) states that "especial investigations are being carried out and nuisances corrected in connection with this industry. It would materially lessen the chances of becoming so if those about to erect new sties would first apply to your Authority for their advice as to construction, &c." From this it would appear that pig-keeping has developed from a domestic matter into a distinct industry, and it may be a question whether it should not be regulated in some more definite manner than by the nuisance section of the Public Health Act.

Offensive Trades—With the exception of the fact that Southall-Norwood has no offensive trades within its boundaries, it is impossible to gather how many exist in the County. Probably they are not numerous, but in one instance action was taken to suppress a nuisance from this source.

Mr. Prouse (Acton) reports that complaint was made of a nuisance caused by bone-boiling. "The Acton Board

took the matter up single-handed and proceeded against the tenant for carrying on a new business without the consent of the Board. Witnesses, however, were brought forward showing that the business had been established for some years, and the action failed." But the Medical Officer is of opinion that "as building operations extend in this District this bone-boiling must be suppressed."

SCAVENGING.

In the Districts where suburban estates are being developed for building purposes, note is made of the number of new roads made or partly made, and in some instances complaint is made of the condition of new roadways.

Mr. T. W. Bullock (Heston and Isleworth) urges that "though the roads are for the major part exceedingly good, some few are in a most insanitary condition, owing to the fact that they are not made up nor drained"; and further, "I am of opinion that the present state of affairs in these localities is a standing menace to the general health of the District."

This is the only instance in which distinct danger to health is alleged, but apart from this, the good condition of roadways is of great importance. Firstly, in order to enable them to be properly scavenged; and secondly, to enable the District to be properly scavenged, since scavenging involves the removal of solid refuse by *road carriage*, just as sewerage is the removal of liquid refuse by *water carriage*.

Refuse Removal.—Refuse is usually regarded as of four kinds—street, trade, manurial, and domestic refuse or dust.

It is reported by Dr. Gunther (Hampton Wick) that "the removal of dust and house refuse was carried out very unsatisfactorily. At the systematic inspection many houses were found where dust and decaying vegetable matter had accumulated, and numerous complaints against the contractor were made. It is probable that this condition prevails more or less in many Districts, as only in two cases is mention made of a periodical removal of house refuse. Mr. J. D. Windle (Southall-Norwood) says: "The work of removing house refuse has been carried out in a most satisfactory manner, the refuse being moved from each house once a week"; and further, "all houses in the District are now supplied with proper sanitary dustbins." Dr. Clothier (Hornsey) reports: "In order to facilitate the collection of dust, the District has been divided into four parts, and a runner appointed for each part. The runner calls weekly at each house in his division, and ascertains if the dust requires removal, enters the fact in his note-book, and reports to the dustman, who follows up and removes the dust as requested." In the more rural Districts doubtless the dust is utilised in gardens or upon the land, and there is less call for removal by the public authority than in the more thickly populated areas. But in some of these Districts the scavenging is complicated by the absence of sewerage, and the addition of excreta to the house refuse in privy and ash-pits, or by the presence of cesspools.

Thus Mr. C. Roberts (Uxbridge Rural), in urging the more frequent removal of night soil, says: the "farmers would be glad of the refuse as manure, the same as they are of soft core or London sweepings. Under existing circumstances it is impossible to get these accumulations removed."

Refuse Disposal.—The disposal of refuse gives rise to difficulties in many places. In some, refuse destructors are at work, as, for instance, at Hornsey and at Ealing, but no complete account can be compiled from isolated references; this would require a special enquiry. The difficulties appear to be much increased by the conveyance of refuse from London Districts by rail, road, and canal, and its deposition in unsuitable localities. Mr. Campbell Gowan (Hendon Rural) mentions a “nuisance on the canal bank not far from Twyford Abbey. In the spring of 1892 I was called upon to give evidence in the case of the Hendon Union Rural Sanitary Authority *v.* Vigers. As the ‘heap’ complained of was situate on the far side of the Brent, we had to proceed against the defendant at the Brentford Police Court. The Brentford Authorities, for some reason best known to themselves, saw fit to tolerate this nuisance, although appealed to by the occupier of the Abbey, one of their own constituents. We were thus carrying the war into the enemy’s camp.” The prosecution was not successful. Dr. R. J. Burton (Brentford Rural) mentions the “nuisance at Twyford (referred to in my last Annual Report) caused by the deposit of refuse on the banks of the canal in this locality, the refuse consisting of decomposing animal and vegetable matter (the contents of dustbins) brought from London in barges.” And further: “A gentleman living near the nuisance took action independently and obtained an injunction to restrain the contractor from continuing the nuisance for three months. The matter is still under consideration and receiving the attention of your Authority.” There would therefore be some difficulty in obtaining an abatement of the nuisance, and no joint action by the Authorities interested appears to have been taken.

But not only is "dust," imported from the Districts of London Sanitary Authorities by contractors, the cause of complaint, but manure imported by private individuals comes under the same ban. For, under the head of manure traffic, Mr. C. Dwight Morris (Staines Rural) says: "This is inevitable in your District, where the chief industry is vegetable and fruit growing for the London markets. Although a large proportion used on the land is comparatively harmless during its conveyance there, there is a proportion termed soft core, which, to say the least, is open to question as to its relation in the production of disease."

MORTUARIES.

In not a few instances complaint is made of the absence of any proper mortuary accommodation, notably in the cases of Finchley, Friern Barnet, and Wood Green. In South Hornsey and Tottenham accommodation appears to be provided since 12 bodies in the former, and no less than 108 in the latter, were removed to a mortuary. In Wood Green the five bodies removed were either taken to an undertaker's, or to the mortuary of the adjoining District of Tottenham.

BURIAL GROUNDS.

No reference is made to the subject of disposal of the dead, or to burial grounds in any of the Reports.

OPEN SPACES.

In reference to open spaces two quotations can be made:—

Dr. Tyndale Watson (Tottenham) says: "I congratulate your Board upon the opening of Bruce Castle Park, and

trust that from time to time land in other parts of the Parish may be acquired, as the beneficial effects of such open spaces cannot be over-estimated. The commons have been greatly improved during the past year, and the seats which your Board have placed on them have been much appreciated."

Mr. Conolly (Wood Green) says: "The District is to be congratulated on the acquisition of Earlham Grove House and ten acres of land. The policy of the Board in securing this land as an open space, is, in my opinion, amply justified by the experience of other outlying parts of London, which are now experiencing the effects of the absence of open spaces in their midst."

PUBLIC BATHS AND WASH-HOUSES.

In speaking of public baths and wash-houses, Mr. F. C. Dodsworth (Chiswick) says: "Both are much needed (in a central position) the latter would be greatly appreciated by the poor, for the purpose of washing articles of clothing. The question of public wash-houses might with advantage be separated from that of public baths."

Incidental mention of this want is also made in other Reports; but no mention is made of such a want having been supplied in any of the Districts.

SPECIAL REPORTS.

In many instances reference is made to Special Reports furnished by Medical Officers of Health to their Sanitary Authorities, especially with regard to cholera and the preventitive and preparatory measures necessary. In one or two instances these Special Reports are partly quoted; but no separate Reports have come into my hands.

PART II.

SUMMARIES OF THE REPORTS OF THE MEDICAL OFFICERS OF HEALTH OF THE SANITARY DISTRICTS, URBAN AND RURAL, IN ALPHABETICAL ORDER.

Details of the vital statistics and sanitary work extracted from the Reports will be found collated in the Tables A, B, and C (I) (II) (III) and (IV), in Part III.

ACTON URBAN SANITARY DISTRICT.

Medical Officer of Health, W. B. Prowse, M.R.C.S. (since resigned).

Estimated population, 25,000.

Births, 763 ; Birth rate, 30·5 per 1,000.

Deaths, 425 ; Death rate, 17 per 1,000.

Deaths under 1 year, 136 ; Infantile mortality, 152 per 1,000 births.

The Infectious Diseases Notification Act appears to be in force.

Systematic Inspection.—The houses in which infectious disease has occurred are inspected ; but house-to-house inspection is urged as necessary, for the purpose of remedying sanitary defects, and preventing the occurrence of such diseases.

Infectious Hospital Accommodation.—There was an outbreak of 13 cases of smallpox in the summer, and considerable difficulty was experienced in finding a hospital in London to receive the several patients. In former

reports the necessity for an isolation hospital has been urged, and some steps have been taken with a view to a site in Willesden Lane. It is urged that the question should no longer be delayed.

Nuisances.—Complaint was made of a bone-boiling nuisance, on the border of the District contiguous to Hammersmith. The Vestry of Hammersmith declined joint action, and the Acton Local Board proceeded against the tenant for carrying on a new business without the consent of the Board, but the prosecution failed.

Sewers.—More adequate flushing of the sewers is recommended as a remedy for the complaints of odours from the sewer ventilators.

Sanitary Work.—258 houses were inspected, 41 drains were tested, 205 nuisances were attended to, 14 school-closets and latrines were inspected, and 13 gangs of gipsies removed.

Food.—2 small parcels of meat, 2 hampers of mackerel, 1 barrel of herrings, and 1 diseased cow, were condemned.

BRENTFORD URBAN SANITARY DISTRICT.

Medical Officer of Health, Henry Bott, L.R.C.P., M.R.C.S.

Estimated population, 13,950.

Births, 492; Birth rate, 35·2.

Deaths, 294; Death rate, 21·0; Deaths under one year, 97. Infantile mortality, 197·1.

The infantile mortality in the three preceding years was respectively, 178·1, 152·3, and 134·9 and the progressive increase is attributed to overcrowding and unfit habitations.

Deaths from Zymotic Diseases.—None from smallpox; measles caused 19 deaths, scarlatina 2, diphtheria 2,

membranous croup 2, whooping cough 4, typhoid fever 1, diarrhœa 18, in all 48, making a zymotic death rate of 3·4, mainly due to measles and diarrhœa in children under five.

Influenza caused directly 12 deaths, and indirectly raised the death rate 2·4 above the decennial average.

Notification of Infectious Diseases.—Under the Act 137 certificates were received, namely, 97 scarlet fever, 6 typhoid fever, 3 typhus fever, 2 puerperal fever, 8 diphtheria, 2 membranous croup, 19 erysipelas. The notification of erysipelas is regarded as unnecessary. Two persons were prosecuted and fined for neglecting to notify two cases of infectious disease discovered during house-to-house inspection. The three cases of typhus occurred in a common lodging-house.

Infectious Diseases Hospital.—Two years ago it was determined to displace the temporary structure by a permanent building, on land adjoining the sewage works, and the present hospital was opened on January 14th. It accommodates 10 patients, but although a great strain has been put upon the accommodation, no patients have been refused admittance. It is not free to all. The cases admitted during the year included 75 scarlet fever, 2 typhus, 2 diphtheria, total 79, of whom 3 died. The first of the three typhus cases was admitted to the West London Hospital, and subsequently transferred to a hospital of the Metropolitan Asylums Board.

Bakehouses, Slaughterhouses, and Workshops have been inspected from time to time.

Common Lodging Houses.—There are 10 registered common lodging houses which have been frequently

inspected, and found "well conducted, and, on the whole, clean," with the exception of the house in which the typhus cases occurred, from which a large quantity of filthy bedding was removed and destroyed. The house was cleansed and disinfected from top to bottom, and is now under new management.

Cholera.—Handbills have been freely distributed advising what to do in case of an outbreak, and the isolation hospital has been ready to receive patients.

Inspections and Nuisances.—1,456 houses and premises have been inspected, and 1,005 nuisances discovered, 310 notices issued, and 991 nuisances abated.

Dairies and Milkshops, of which the number registered is 14, have been regularly visited and found clean.

Disinfection. — 87 houses have been disinfected, 15 cleansed, and 152 articles disinfected by steam.

Mortuary.—One body was removed to mortuary.

Canal Boats.—207 canal boats are registered at Brentford, 197 have been inspected during the year, 22 contraventions were discovered, and a conviction in one case obtained.

CHISWICK URBAN SANITARY DISTRICT.

Medical Officer of Health, F. C. Dodsworth, L.R.C.P.,
M.R.C.S.

Estimated population, 22,782.

Births, 679 ; Birth rate, 29·80 per 1000.

Deaths, 392 ; Death rate, 17·20 per 1000.

Deaths under 1 year, 115 ; Infantile mortality, 169 per 1000 births.

Zymotic Diseases. — An epidemic of measles prevailed during the second quarter of the year. In January influenza was epidemic.

Water.—Eleven polluted wells have been closed during the year. The general water supply of the District is from the West Middlesex Company's works. In order to provide a sufficient supply a constant service is advocated.

Factory and Workshops Act, 1891, Section 27.—It is observed it is "part of the duties of the sanitary officers to visit" the outworkers in certain trades whose names and addresses have been furnished in accordance with the order of the Home Secretary.

Sale of Food and Drugs Acts.—Several substantial convictions have been obtained under these Acts against vendors of milk.

Slaughterhouses, Bakehouses, Cowsheds, and Dairies have been under constant supervision, and found generally clean.

Systematic Inspection.—The sanitary staff has been reduced, but the house-to-house inspection has been carried on, and is hoped to be completed in a few months; 404 houses having so far been inspected. The insanitary condition of Hunt Street is being remedied. A stagnant pond on the Stile Hall Estate has been filled in.

Food.—Three convictions with fines were obtained for selling unsound food.

Sewers.—Ventilating shafts for the sewers have been erected in various parts of the District.

Public Baths and Washhouses are both much needed in some central position

EALING URBAN SANITARY DISTRICT.

Medical Officer of Health, C. A. Patten, L.R.C.P., M.R.C.S.

Estimated population, 26,500.

Births, 492 ; Birth rate, 18·5 per 1,000 population.

Deaths, 316 ; Death rate, 11·92 per 1,000 population.

Deaths under 1 year, 61 ; Infantile mortality, 123·9 per 1000 births.

Notifications of Infectious Disease.—The Infectious Diseases Notification Act has been in force for three complete years. During the year 197 notifications were received ; scarlet fever was most prevalent. Full publicity was given to the suggestions of the Local Government Board as to the prevention of cholera.

Hospital for Infectious Diseases.—The resources of the Isolation Hospital were taxed to the utmost. Seventy-three cases of infectious disease were admitted, of which 66 were scarlet fever. The wards are now open to all classes, but although re-arrangements have increased the accommodation, and the existing premises prove equal to ordinary demands, the possibility of supplementary accommodation being required with increase of population, and in the presence of exceptional prevalence of infectious disease, is referred to. A suitable site exists for the erection of an extra temporary building.

Sewers and Sewage.—The sewers have been systematically flushed, a special deodorising apparatus being also used when necessary, and the complaints of sewer emanations have become less frequent. The northern farm at Perivale has caused no annoyance. The southern sewage works have caused no inconvenience to the inmates of the Local Board's hospital adjacent, and the treatment of the sewage is carried on successfully.

EDMONTON URBAN SANITARY DISTRICT.

Medical Officer of Health, C. D. Green, M.D., D.P.H.

Estimated population, 25,565.

Births, 927 ; Birth rate, 36·2 per 1,000 population.

Deaths, 593 ; Death rate, 23·1 per 1,000 population.

Deaths under one year, 163. Infantile mortality, 175·8 per 1,000 births.

Statistics.—The Strand Union and Schools are excluded, from the above figures, but the Edmonton Union is included, as the number of the population and of the deaths of persons belonging to the District in that Institution are not supplied.

Infectious Diseases Notification.—The Act was in force during the whole year. Scarlet fever was prevalent, an outbreak occurring amongst the children attending St. James' Day and Sunday Schools, and was terminated by the schools being closed.

Infectious Diseases Hospital.—The want of an Isolation Hospital is much felt, and the need for such accommodation is increasing. In instances of reckless exposure the censure of the Clerk to the Board was given.

Measles.—An epidemic of measles was prevalent during July and August, causing 26 deaths.

Cowsheds, Dairies, and Milkshops.—Regulations under this Order have been recommended, and are under consideration.

Sanitary Inspection.—It is suggested that the Sanitary Inspector requires supplemental assistance in the discharge of his duties, especially in clerical work.

ENFIELD URBAN SANITARY DISTRICT.

Medical Officer of Health, J. J. Ridge, M.D., B.A., B.Sc., etc.

Estimated population, 33,570.

Births, 1,072; Birth rate, 32·1 per 1,000 population.

Deaths, 458; Death rate, 13·6 per 1,000 population.

Deaths under one year, 123. Infantile mortality, 114·7 per 1,000 births.

Statistics.—It is remarkable that not a single death from diarrhoea occurred during the year, but the deaths from enteric fever and diphtheria were at the rate of ·47 and ·56 per 1,000, respectively.

Infectious Diseases Notification.—482 cases of infectious disease were reported, including 232 scarlet fever, 101 enteric fever, and 94 diphtheria, these numbers being high.

Infectious Hospital.—A temporary Isolation Hospital was opened in December, 1891, and arrangements are being made for the erection of a permanent hospital at World's End, in which provision is being made for the separate treatment of scarlatina, diphtheria, and enteric fever cases, male and female. 92 cases of scarlet fever were admitted to the temporary Hospital, 9 cases of enteric fever were treated at the Enfield Cottage Hospital, and two cases of smallpox were removed to the Highgate Smallpox Hospital.

Sanitary Inspection.—The Sanitary Inspector is scarcely able to attend to matters brought under his notice, on account of the extension of building and population, and one Inspector is insufficient.

Sewers and Sewage.—In accordance with the suggestions of the Local Government Board's Inspector, made when investigating the enteric fever epidemic of 1891, the sewer junction in the High Road, Ponder's End, has been altered, 15 ventilating shafts have been erected, the sewage farm has been enlarged, and other sanitary changes made.

Water Supply.—The water supplied by the Board has been tested from time to time, and been found of good average purity. From other sources, of 15 samples of water analysed 7 were found polluted, and the causes were removed or the supplies closed.

Dwelling Houses.—One house condemned as unfit for human habitation was made fit, and six other houses have been condemned. 45 houses were inspected from house to house, and 32 were found unfit for habitation. The necessary repairs have been promised.

Drainage.—In one road the drainage of the houses is in a dangerous condition, urgently requiring the construction of a proper sewer, meanwhile the cesspools are frequently emptied. The flushing closets in houses in several roads are defective, some of these have been amended, but much remains to be done. Sanitary defects exist in large numbers, and house-to-house inspection is highly desirable. A new bye-law has provided that all new houses shall be inspected and certified before occupation.

FINCHLEY URBAN SANITARY DISTRICT.

Medical Officer of Health, James Turle, M.D.

Estimated population, 17,042.

Births, 477 ; Birth rate, 27·5 per 1,000 population.

Deaths, 207 ; Death rate, 12·2 per 1,000 population.

Deaths under one year, 43. Infantile mortality, 90 per 1,000 births.

Infectious Diseases Notification.—Under the 1889 Act, 184 cases of infectious disease were notified by medical certificates.

Epidemics.—An epidemic of influenza prevailed in January, causing 16 deaths. The North Finchley Board Schools and the Christ Church Schools were closed in June and St. Mary's Schools in December, on account of outbreaks of measles.

Infectious Diseases Hospital.—The Hospital was opened in April, 1889. During the year 1892, 36 patients were admitted.

Cesspools.—The gradual abolition of cesspools has been steadily going on, and a very small number remain. In one instance, the Local Board found it necessary to intercept the sewage flowing into the River Brent from certain low-lying cottages, by constructing a cesspool.

Water.—The Medical Officer condemned ten out of seventeen samples of well waters.

Sewage Farm.—Thirty-four acres of pasture land have been added, and the effluent has been improved by the extension and improvement of the works. The process includes precipitation of the raw sewage by lime and sulphate of ammonia, pressing the sludge into cake, or pumping, or carrying it on to agricultural land, and irrigating the supernatant liquid over prepared beds and land.

Sewers.—Many cast-iron ventilating columns from 12 to 20 feet high, have been erected along the lines of sewers. In some instances, it has been found difficult to select situations sufficiently distant from windows, and the Medical Officer recommends shafts similar to drain ventilating pipes, affixed to the fronts of the houses in order to ventilate the sewer at a higher level.

The Medical Officer recommends large automatic flushing tanks, and water vans for flushing the sewers during the dry season.

Disinfection.—Fumigation is performed with vaporised carbolic acid, and the room and infected articles are subsequently exposed freely to the air, day and night. Mattresses and other articles exposed to serious infectious disease are either destroyed, or disinfected by high pressure steam, the Hampstead apparatus being used for the purpose.

The Medical Officer concludes with the following recommendations:—

1. The plain naming of all roads, and systematic numbering of all buildings.
2. The careful preparation of a complete plan of all the sewers and drains (private as well as public) of the District; also showing all cesspools and wells.
3. Arrangements by the Authority for the supply of earth for, and the removal of refuse from, earth-closets.
4. Regular and free flushing of all sewers in dry weather.

5. Free ventilation of all sewers, by high ventilating pipes (as outlets) at the side of all buildings, as well as by street openings (as inlets).
6. A Cottage Hospital for accidents.
7. Public conveniences.
8. A public mortuary.

FRIERN BARNET URBAN SANITARY DISTRICT.

Medical Officer of Health, Hugh Stott, L.R.C.P., M.R.C.S.

Estimated population, 7,004.

Births, 191 ; Birth rate 27·2 per 1,000 population.

Deaths, 79 ; Death rate, 11·2 per 1,000 population.

Deaths under 1 year, 15. Infantile mortality, 78 per 1,000 births. (Colney Hatch Lunatic Asylum is not included in the above figures.)

Infectious Diseases Notification.—Under the Notification Act, adopted two years previously, 56 cases of infectious disease were notified. The slight increase on the number of the previous year was due entirely to scarlet fever.

Infectious Diseases Hospital.—The Medical Officer of Health draws attention to the fact that the District is not provided with isolation hospital accommodation, and that in two instances parents had to give up work, and obtain relief from the Guardians, whilst infectious disease prevailed in their families.

Disinfection.—The friend of a man who had died from cholera in Paris, and who had been nursed by him there, brought back with him a bag full of soiled linen, this

was promptly destroyed by burning, and his room was thoroughly disinfected.

Water Supply.—The District is supplied by the Barnet Water Company. The water is drawn from deep chalk wells, and the quality is reported excellent, but the supply is insufficient, and the Authority is in communication with the Local Government Board, on the question of a constant system of supply.

A few houses supplied by wells, are still without water laid on to the closets, hand flushing being resorted to.

Sewage Disposal Works.—The effluent has been excellent and the filter beds efficient.

Sewers and Gullies have caused few complaints. Scavenging and cleansing have been satisfactorily performed.

Inspections, Nuisances, &c.—Small house property is constantly inspected. The urinals and water-closets attached to public-houses have been put into a proper sanitary condition. An action at law took place last year in reference to a nuisance caused by the discharge of foetid matter from an adjoining District, but the nuisance still exists. Certain excavations also are the cause of the collection of stagnant and foul water.

HAMPTON URBAN SANITARY DISTRICT.

Medical Officer of Health, Wentworth Tyndale, M.B.

Estimated population, 5,800.

Births, 144 ; Birth rate, 24·8 per 1,000 population.

Deaths, 85 ; Death rate, 14·6 per 1,000 population.

Deaths under 1 year, (?) . Infantile mortality, (?)
per 1,000 births.

Notification of Infectious Diseases.—One case of typhoid fever, 66 cases of measles, 3 of diphtheria, and 2 of membranous croup, came to the knowledge of the Medical Officer of Health, but no mention is made of the Infectious Diseases (Notification) Act.

Infectious Diseases Hospital.—One case of diphtheria was removed to the Isolation Hospital.

Water Supply.—The severe winter caused the water pipes of many houses to be frozen, with consequent deprivation of water.

Sewerage.—The sewage of Hampton has been cut off from the Thames for a number of years, and has been confined to cesspools which frequently overflow, so that it is a matter of surprise to the Medical Officer of Health that the District escapes a serious outbreak of disease. The drainage of the District is still being considered.

Precautions against Cholera.—The Medical Officer forwarded a Memorandum of certain suggestions and precautions to the Local Board during the summer, upon which no action was taken.

Bakehouses, Slaughterhouses, and Dairies have been found in a satisfactory condition.

Smoke from the waterworks is at times excessive.

HAMPTON WICK URBAN SANITARY DISTRICT.

Medical Officer of Health, T. Gunther, M.D.

Estimated population, 2,378.

[Births, 67; Birth rate, 28·59 per 1,000 population.

Deaths 29; Death rate, 12·19 per 1,000 population.

Deaths under 1 year, 5. Infantile mortality, 75 per 1,000 births.

Infectious Diseases Notification.—In all, 16 cases were notified.

Epidemics.—An epidemic of measles occurred in November, and the Hampton Wick Endowed Schools, the Board School, and the Sunday School were in consequence closed for several weeks.

Infectious Diseases Hospital Accommodation.—The want of isolation hospital accommodation is severely felt, and the matter is recommended for serious consideration.

Inspection.—A systematic inspection of the whole District was made upon the receipt of the Memorandum upon Cholera from the Local Government Board, a lengthy Report was presented by the Medical Officer to the Sanitary Committee, and the Recommendations of the Committee thereupon were adopted by the Board.

Water Supply.—A small number of houses are still supplied by well water. Samples of water from six of these houses were found polluted, and a good supply was substituted in each case.

Sewerage.—The main sewerage scheme has been in operation for a year, and nearly all the houses in the District have completed their connections.

Refuse Removal.—At the systematic inspection the removal of dust and house refuse was found to be very unsatisfactory, and strict supervision to prevent accumulation is recommended.

The Slaughterhouses and Bakehouses were inspected and found in satisfactory condition.

Nuisances.—A number of nuisances, discovered upon complaint or systematic inspection, were abated. Attention is called to the condition of School Lane, which is undrained and in a filthy condition, so as to be injurious to health.

Unfit for Human Habitation.—The Medical Officer reported a cottage in such a dilapidated condition as to be unfit for human habitation.

HANWELL URBAN SANITARY DISTRICT.

Medical Officer of Health, R. Graves Burton, M.D.

Estimated population, 6,274.

Births, 161; Birth rate, 25·5 per 1,000 population.

Deaths, 81; Death rate, 12·8 per 1,000 population.

Deaths under 1 year, 18. Infantile mortality, 111 per 1,000 births.

Infectious Diseases Notification.—Under the Infectious Diseases (Notification) Act, which was adopted in 1890, 61 cases of infectious diseases were notified during the year.

Epidemics.—None were prevalent during the year.

Infectious Diseases Hospital Accommodation.—There is no accommodation for the isolation of infectious diseases, and the Medical Officer recommends provision to be made in junction with the Brentford Rural Sanitary Authority. Upon the threatened invasion of cholera, the Board made arrangements for the erection of a temporary hospital for cholera in case of necessity.

Water Supply.—The water supply of the District, from the Grand Junction Water Works Company is reported good, and nearly all shallow wells have been closed.

Sewerage.—The erection of ventilators and automatic flushing tanks have largely reduced the complaints of foul smells from the sewers, but the continuance of periodical examination is recommended.

River Pollution.—The River Brent has become very filthy of late years, due to pollution higher up the stream, and beyond the boundaries of the District. The Rural Sanitary Authority of the Brentford Union is reported to be taking action.

Inspections.—During the year house-to-house and special inspections have been made, and a number of nuisances have been abated.

HARROW URBAN SANITARY DISTRICT.

Medical Officer of Health, John Fletcher Little, M.B.,
M.R.C.P.

Estimated population, 6,876.

Births, 142; Birth rate, 20·6 per 1,000 population.

Deaths, 84; Death rate, 12·2 per 1,000 population.

Deaths under 1 year, 16; Infantile mortality, 112 per 1,000 births.

Infectious Diseases Notification.—The Act has been in force in the District since 1890. During the year, 18 cases of infectious disease were notified.

Isolation Hospital.—There is no infectious diseases hospital for the District, but the Local Board have lodged plans, &c., with the Local Government Board for the purpose of establishing one. Harrow School has a Sanatorium attached for its own use.

Water Supply.—The District is supplied on the constant system by the Colne Valley Water Company.

Ventilation of Sewers and Drains.—Experiments are being carried on, in order to ascertain the best method of providing for the removal of sewer gas.

Slaughterhouses.—Many are old and situated in the midst of populous parts of the town. A public abattoir is recommended.

Dairies, &c., require much improvement to fulfil modern requirements.

Harrow School consists of above twenty boarding-houses and the school buildings. The number of boys is between 600 and 700. They are dispersed, and return three times a year; and as they mix freely with the inhabitants, it is urged that they must be regarded as an integral part of the population.

HENDON URBAN SANITARY DISTRICT.

Medical Officer of Health, F. W. Andrew, M.R.C.S., L.R.C.P.

Estimated population, (?) 16,000.

Births, 431; Birth rate, 26·9 per 1,000 population.

Deaths, 308; Death rate, 19·2 per 1,000 population.

Deaths under 1 year, (?) ; Infantile mortality (?) per 1,000 births.

Notifications of Infectious Diseases.—Returns mislaid. No smallpox reported. Zymotic diseases few, excepting scarlet fever, Child's Hill being the greatest, and Mill Hill the least sufferer. Measles and whooping cough included amongst notifiable diseases, and erysipelas

excluded. Measles was very prevalent in June, especially in the Hendon Ward, chiefly attacking the schools, and necessitating the closure of two day-schools.

Cowsheds and Dairies were inspected and found in good order. A few notices to whitewash were served.

Systematic Inspection.—1,878 houses were inspected, and 94 notices served.

Nuisances.—252 nuisances were abated.

Drainage and Sewerage.—The houses in the “Low Level area” of the New Hendon District have been connected to a new public sewer, and a pumping station erected to pump the sewage up into the Edgware Road sewer.

Sewers have been laid in Finchley Road, West Heath Road, and Elm Terrace, and the drains of the houses connected to them. The sewers are flushed weekly, and disinfectants used freely.

Sewage Disposal.—The sewage is treated by the International Sewage Purification Company, and the effluent satisfies the requirements of the Rivers Pollution Act.

Infectious Diseases Hospital.—23 cases of scarlet fever were admitted to the Hospital. Four of the cases belonged to Willesden. Only one death occurred amongst the cases.

Statistical Tables.—None, the data being insufficient, and the Medical Officer having been recently appointed.

HESTON AND ISLEWORTH URBAN SANITARY DISTRICT.

Medical Officer of Health, T. W. Bullock, M.R.C.S.

Estimated population, ?

Births, ? ; Birth rate, 29·84 per 1,000 population.

Deaths, 414 ?; Death rate, 16·78 per 1,000 population.

Deaths under 1 year, 106. Infantile mortality, ? per 1,000 births.

Infectious Diseases Notification.—The Act has been in force in the District since January, 1890, and measles is also scheduled. During the year 234 cases of infectious disease were notified.

Epidemics.—During January influenza swelled the death rate to 40·57 per 1,000.

Infectious Diseases Hospital.—The isolation hospital is situated at Dockwell Lane, Heston, near Cranford, but it is noted that the accommodation would be insufficient to provide also for cholera patients. Two prosecutions for the exposure of persons suffering from infectious disease were successful.

Water Supply.—The water supply is good, being derived from the Grand Junction Company's mains, with a few exceptions. Nine samples of water, serving 26 houses, were found polluted. A service from the mains was substituted or new wells were sunk in some cases, and other cases are still under notice.

Drainage and Sewerage.—Complaint is made of the overflowing of cesspools on the new estate of St. Margaret's. In the District 43 premises with defective drainage were

connected to the sewers, and nuisances arising from four foul ditches were also abated.

Housing of the Working Classes Act.—Under this Act 17 houses are being dealt with, three of which up to the present time have been made fit for habitation.

Nuisances.—A nuisance from fish-frying was abated by legal proceedings, and a nuisance at Southall Gasworks was also abated. The application for a licence for a slaughter-house was refused. The insanitary condition of the roads in St. Margaret's and in Hounslow are complained of, also the difficulty of dealing with deposits of soft core.

Mortuary.—The Medical Officer strongly recommends the provision of a mortuary for Hounslow.

HORNSEY URBAN SANITARY DISTRICT.

Medical Officer of Health, Henry Clothier, M.D.

Estimated population, 46,354.

Births, 1,169; Birth rate, 25·21 per 1,000 population.

Deaths, 508; Death rate, 10·95 per 1,000 population.

Deaths under 1 year, 121. Infantile mortality, 103·5 per 1,000 births.

Infectious Diseases Notification.—The Act has been in force since January, 1890. During 1892 the number of cases notified was 340.

Epidemics.—Rather more than 10 per cent. of the deaths during the first quarter of the year were attributed directly or indirectly to influenza.

Infectious Diseases Hospital.—The isolation hospital is situated at Coppett's Road, Muswell Hill, and additional wards were opened in October. During the year 86 cases were admitted, of which 81 were scarlet fever, 2 smallpox, 2 diphtheria, and 1 typhoid fever. The ambulance was used for the conveyance of 81 patients.

Disinfection.—Upwards of 200 houses were disinfected, and the various infected articles were subjected to high pressure steam disinfection, either at the apparatus at Hornsey or at the Chamber at the Hospital.

Dairies Milkshops, and Cowsheds were periodically inspected, and found in order.

Slaughter-houses.—The ten slaughter-houses were visited and found in sanitary condition.

House Refuse Removal.—The dust is removed by a system of weekly collection made from house to house.

Destructors.—8,028 tons of house refuse were cremated in the furnaces at the Sanitary Dépôt at Hornsey.

Housing of the Working Classes Act, 1890.—Under this Act 35 houses were represented as unfit for human habitation, of which 25 were repaired and 10 closed.

Nuisances and Sanitary Defects.—Two cesspools were discovered; one was abolished, the other was in connection with a house closed under the Housing of the Working Classes Act. 381 houses were examined during the year, and defects were found in 90 per cent., and notices served accordingly.

Sewers.—The sewerage system was regularly flushed. An application was made to the Local Government Board to borrow £1,000 for the purpose of erecting ventilating lamp columns. In September the Stroud Green District and the low-lying portion of Islington were flooded with sewage on account of a heavy rainfall and the insufficiency of the main outfall sewers of the London County Council to carry away the increased amount of sewage. Active measures are reported as being taken to remedy this condition.

SOUTHALL-NORWOOD URBAN SANITARY DISTRICT.

Medical Officer of Health, J. D. Windle, L.R.C.S., M.R.C.S.

Estimated population, 5,188.

Births, 193; Birth rate, 37·3 per 1,000 population.

Deaths, 75; Death rate, 14·4 per 1,000 population.

Deaths under 1 year, 26. Infantile mortality, 135 per 1,000 births.

Public Institutions.—In this District are situated the London County Asylum, Norwood, with a population of 2,037, and 188 deaths, and the St. Marylebone Schools, Southall, with a population of 335, and 4 deaths, and these have been excluded from the above figures.

Infectious Diseases Notification.—The Act has been in force since July, 1891, and during the year 55 cases have been notified.

Disinfection.—Arrangement has been made for the use of the disinfecting Chamber belonging to the Joint Hospital Authorities.

Infectious Diseases Hospital.—Isolation is provided at the Joint Hospital, Hillingdon, near Uxbridge, and 11 cases,

which all recovered, were treated there during the year. The Medical Officer regrets that more advantage was not taken of the accommodation afforded, and also the delay caused by the distance, namely, from Cowley, that the ambulance has to travel to remove patients.

Water Supply.—The quality and quantity of water supplied by the South-Western Suburban Company was satisfactory. During the year 4 polluted wells were closed.

House Refuse Removal.—The refuse is removed from each house once a week, and all the houses in the District are provided with proper sanitary dustbins.

Nuisances.—During the year 314 nuisances of various kinds were investigated.

Housing of the Working Classes Act.—47 houses were reported under this Act, of which 6 were closed and 20 repaired. Twenty other houses previously reported were put into a sanitary condition.

Cowsheds, Dairies and Milkshops were frequently examined, and found satisfactory.

Slaughter-houses were inspected previous to registration, and two alterations were made.

Adulterated Food.—29 samples were taken under the Sale of Food and Drugs Acts, resulting in 3 prosecutions and 2 convictions.

Canal Boats.—Southall-Norwood is a Registration District, but has no boats on the Register. 205 boats were inspected during the year, resulting in 3 prosecutions and 1 conviction.

Adoptive Acts.—Besides the Infectious Diseases Notification Act, 1889, the Public Health Amendment Act, 1890, and the Infectious Diseases Prevention Act, 1890, are in force in the District.

Sanitary State of the District.—The Medical Officer of Health expresses the opinion that the sanitary condition generally is satisfactory, excepting certain parts where foul privies and surface wells prevail, but the contemplated extension of the main sewer is expected to remedy this

SOUTHGATE URBAN SANITARY DISTRICT.

Medical Officer of Health, ?

Estimated population, 10,740.

Births, 302 ; Birth rate, 28·1 per 1,000 population.

Deaths, 144 ; Death rate, 13·4 per 1,000 population.

Deaths under 1 year, 35. Infantile mortality 116 per 1,000 births.

(The Northern Fever Hospital has been excluded from these figures.)

Infectious Diseases Notification.—The Act has been in force since December, 1889, and 108 cases were notified during the year 1892.

Epidemics.—Scarlet fever was prevalent in more than usual proportions, and in May and June there was an epidemic of measles.

Disinfection.—Fumigation and disinfection were carried out after the infectious diseases notified had run their course ; in some cases the bedding, &c., was destroyed, in others removed for disinfection.

Infectious Diseases Hospital.—The District does not possess an isolation hospital, and the Medical Officer expresses the opinion that many of the cases of scarlet fever might have been prevented had the District been provided with an isolation hospital. But, the Northern Hospital of the Metropolitan Asylums Board at Winchmore Hill is within the District, and, during the year, 4,907 cases of infectious disease were treated in this institution—namely, 4,666 of scarlatina; 40 of enteric fever, and of 201 diphtheria. Of these, 38 died—namely, 32 from diphtheria, 2 scarlatina, 1 measles, 1 influenza, and 2 from other diseases.

General Sanitation.—1,084 houses were inspected, and 124 notices dealing with about 300 houses were served. Two houses were closed as unfit for human habitation. The 7 slaughter-houses, the 12 bakehouses, and the dairies, cowsheds, and milkshops were regularly inspected.

Sewers.—The southern main sewer having been found defective, it was decided to relay it. New sewers were laid in several places. Flushing was systematically carried out, and 56 ventilating shafts were fixed.

A number of defective roads were made up.

SOUTH HORNSEY URBAN SANITARY DISTRICT.

Medical Officer of Health, Thomas S. H. Jackman,
L.R.C.P.L.

Estimated population, 17,100.

Births, 389; Birth rate, 22·8 per 1,000 population.

Deaths, 214; Death rate, 12·5 per 1,000 population.
Deaths under 1 year, 74. Infantile mortality, 190 per 1,000 births.

Infectious Diseases Notification.—The Act came into force in the District in September, 1892. From that time to the end of the year 67 cases of infectious disease were notified.

Infectious Diseases Hospital.—No accommodation for the isolation of infectious diseases is provided. Negotiations with the Enfield Local Board proved unsuccessful.

Water Supply is derived from the New River Company.

Sewerage.—The District drains into the Metropolitan system, as well as the adjoining Districts of Hornsey and Tottenham.

Sanitary Works.—A table of sanitary works carried out during the year accompanies the Report.

STAINES URBAN SANITARY DISTRICT.

Medical Officer of Health, Albert Curtis, M.R.C.S.

Estimated population, 5,102.

Births, 149; Birth rate, 29·2 per 1,000 population.

Deaths, 72; Death rate, 14·11 per 1,000 population.

Deaths under 1 year, 15. Infantile mortality, 108·7 per 1,000 births.

Infectious Diseases Notification.—The Act has been in force since 1890: during the year 17 cases of infectious disease were notified, and all recovered.

Infectious Diseases Hospital.—No isolation hospital has been provided for the District.

Water Supply.—The District is within the area of supply of the South-Western Suburban Water Company, but a

number of surface wells exist which are liable to dangerous pollution from the number of cesspools and the porous nature of the sub-soil. Complaints as to the condition of the wells are frequent, and eleven were closed during the year.

Drainage and Sewerage.—Owing to the low levels, and the water-logged sub-soil, the great expense of a sewerage system appears to have engaged the serious attention of the Local Board for years past. At present the District is drained by cesspools, and the Medical Officer points out the necessity for the discontinuance of the use of the surface wells.

Nuisances.—During the year 70 nuisances of various kinds were abated, amongst which, those arising from cesspools and wells are conspicuous.

Housing of the Working Classes Act.—Three cottages were condemned as unfit for human habitation.

TEDDINGTON URBAN SANITARY DISTRICT.

Medical Officer of Health, Thomas Gunther, M.D.

Estimated population, 10,525.

Births, 293. Birth rate, 27·9 per 1,000 population.

Deaths, 140. Death rate, 13·33 per 1,000 population.
Deaths under 1 year, 25. Infantile mortality, 85·3 per 1,000 births.

Infectious Diseases Notification.—The Act has been in force in the District since February, 1890, and 25 cases of infectious disease were notified during the year.

Epidemics.—Influenza was very prevalent at the beginning of the year, and caused 9 deaths.

Infectious Diseases Hospital.—The District is unprovided with accommodation for the isolation of infectious diseases. The Medical Officer has several times urged the necessity for such accommodation, but without result.

Water Supply.—About 66 samples of well waters were analysed, and 56 were found polluted, and in nearly every case the wells were closed, and the Grand Junction Water Company's supply laid on.

Drainage and Sewerage.—There are probably 5,000 cess-pools in the District. Sewerage operations are in progress in the District, but regret is expressed at the delay during the last year, preventing the improvement of house-drainage.

Periodical Inspections.—The slaughter-houses were on the whole found in satisfactory condition, the cowsheds and dairies in good order, and the bakehouses were not in fault, except as to white-washing in a few instances.

House Refuse Removal.—Some difficulty was experienced in obtaining the removal of dust due to the want of provision of proper receptacles, and to neglect of occupiers.

Nuisances.—About 284 nuisances of various kinds were abated during the year, of which 161 were due to overflowing cesspools and stopped drains. The night soil carts also caused some trouble.

Movable Dwellings.—Two nuisances, caused by the occupiers of caravans, were abated by their removal.

TOTTENHAM URBAN SANITARY DISTRICT.

Medical Officer of Health, W. Tyndale Watson,
M.A., M.D.

Estimated population, 73,590.

Births, 2,429; Birth rate, 33·0 per 1,000 population.

Deaths, 1,237; Death rate, 16·8 per 1,000 population.

Deaths under 1 year, 361. Infantile mortality, 148·6 per 1,000 births.

Infectious Diseases Notification.—Under the Act 717 cases of infectious disease were reported during the year.

Infectious Diseases Hospital.—The Medical Officer regrets that the District is still without hospital accommodation for the isolation of infectious cases, and again urges action to be taken.

Water Supply.—A polluted well, supplying a terrace of houses, was closed.

Drainage and Sewerage.—1,070 yards of brick-sewer, 940 yards of surface drain, 500 yards of 12-inch, and 100 yards of 9-inch sewers have been laid, 600 yards of old sewers relaid, and many house drains. Manholes and ventilators have been constructed, and 10 up-cast shafts erected. The better drainage of Scotland Green is under consideration.

Roads.—Many new private roads have been constructed and other roads requiring to be made-up are under consideration.

Open Spaces.—The Bruce Castle Park has been opened to the public, and the Commons have been greatly improved, and seats placed upon them.

Housing of the Working Classes Act.—The Medical Officer advised putting the Act into force in regard to Bishop's Cottages at Hale, but the owners have agreed to carry out the required works.

Nuisances.—A considerable amount of house-to-house inspection was carried out; the bakehouses, slaughter-houses, and dairies were periodically inspected; 2,255 notices for the abatement of nuisances were served, and a large amount of sanitary work carried out.

TWICKENHAM URBAN SANITARY DISTRICT.

Medical Officer of Health, W. Marston Clark, L.R.C.P., M.R.C.S.

Estimated population, 16,000.

Births, 406 ; Birth rate, 25·3 per 1,000 population.

Deaths, 250 ; Death rate, 15·6 per 1,000 population.
Deaths under 1 year, 42. Infantile mortality, 103·4 per 1,000 births.

Infectious Diseases Notification.—The Act has been in force in the District since January, 1890. During the year 123 cases of infectious disease were notified.

Epidemics.—Twenty-seven of the 59 cases of scarlet fever notified occurred in two of the public institutions in the Parish, namely, Metropolitan and City Police Orphanage, and the Boys Home. At the former Institution the cases (12) were isolated in a hospital in the grounds, from the latter the cases (15) were immediately removed to the Cottage Hospital.

Infectious Diseases Hospital.—The Isolation Hospital (Cottage Hospital) is situated on vacant land near the sewage works, within the District. During the year 28 cases of scarlet fever, and one of diphtheria were admitted. It has been recently repaired and improved. The question of additional accommodation for diseases other than scarlet fever was not considered urgent at present.

Disinfection and Cleansing were carried out on a large scale at the public institutions, and at other places where required after infectious diseases.

Water Supply.—Of 16 specimens of well water, two were found to be polluted, and the Company's water was substituted.

Slaughter-houses, Bakehouses, Cowsheds, and Dairies were repeatedly inspected. A sewage nuisance was discovered at a farm, and is about to be abated.

Contagious Diseases (Animals) Act.—Declarations were received of the existence of swine fever in two piggeries, and the animals were destroyed.

Housing of the Working Classes Act.—Five cottages were closed as unfit for human habitation.

Nuisances.—Inspections of houses were made on a large scale, and a considerable number of notices served to abate nuisances. The nuisance caused by a gipsy encampment in the Mereway was permanently abated. Regulations were drawn up to mitigate the nuisance arising from the removal of gas lime from the gasworks, and were complied with.

UXBRIDGE URBAN SANITARY DISTRICT.

Medical Officer of Health, W. Rayner, M.R.C.S.

Estimated population, 8,206.

Births, 197 ; Birth rate, 24·0 per 1,000 population.

Deaths, 135 ; Death rate, 16·6 per 1,000 population.

Deaths under 1 year, ? . Infantile mortality, ? per 1,000 births.

Infectious Diseases Notification.—The number of infectious diseases notified during the year was 55.

Epidemics.—In July and August measles was epidemic, and the Medical Officer requested the schools to prolong the holidays another fortnight. In November the disease was again prevalent, and the Local Board ordered the schools to be closed, which order was generally obeyed.

Infectious Diseases Hospital.—A death from diphtheria, and another from scarlatina, occurred at the "Joint Hospital," and 41 cases of infectious disease are reported to have been removed for treatment in "Isolation Hospital."

Water Supply.—The supply of water has been improved, new engines and pumps have been provided, and appear to be able to give almost a continuous supply. The quality has been found good.

Sanitary Work.—A long chronological list of details of sanitary work accompanies the Report.

WILLESDEN URBAN SANITARY DISTRICT.

Medical Officer of Health, D. S. Skinner, M.D.

Estimated population, 65,744.

Births, 2,085; Birth rate, 31·7 per 1,000 population.

Deaths, 945; Death rate, 14·37 per 1,000 population; Deaths under 1 year, 333. Infantile mortality, 159·7 per 1,000 births.

Infectious Diseases Notification.—The Act has been in operation more than five years, the total number of cases of infectious disease notified during the last year was 634.

Epidemics.—Influenza prevailed in the early part of the year. In July, and again in the Autumn, there was a decided increase in the prevalence of scarlet fever, 366 cases being notified during the year. As a matter of urgency, arrangements were made with the Hendon Sanitary Authority for the use of their hospital until the Board's hospital, then being erected in the District, was

completed. The prevalence of diphtheria also increased "side by side" with scarlet fever. Measles also showed an increased prevalence, judged by the number of deaths, namely, 48.

Infectious Diseases Hospital.—An iron isolation hospital on a site in Dog Lane was completed and occupied by the 16th August. It provides accommodation for six or eight beds in two wards, and the necessary offices. By the end of the year 38 patients had been admitted, of which 22 had been discharged well, and one died. A disinfecting apparatus is to be provided on the spot. Smallpox cases have been treated at the Highgate Smallpox Hospital.

Water Supply.—The West Middlesex Water Company supplies the District, and the Medical Officer advises a continuous supply.

Drainage and Sewerage.—The District is divided by a ridge into two drainage areas. Two-thirds of the houses drain into the Metropolitan system, and the remaining third into a local system discharging at a sewage farm.

Sewage Farm.—This consists of two tanks, twenty filtering beds, and about 13 acres for "surface filtration," the chemicals used for precipitation being lime and alum. The stiff clay soil, with a thin super-stratum of loam, causes difficulties in filtration.

River Pollution.—The stagnation in the pools of the River Brent, which forms the north-west boundary of the District, has been benefited by recent works.

Bakehouses.—"The new bakehouses are generally on the ground level, and in excellent condition." Those in the Kilburn District are underground but efficiently ventilated. Upon inspection they were found in good condition generally, excepting that about one-half required whitewashing

Dairies and Cowsheds.—Three dairies and milkshops were found not to be registered in compliance with the Dairies, etc., Order. The cowsheds were generally in good condition.

Slaughter-houses.—Some of these are badly situated, and the Medical Officer thinks it would be of advantage if they could be abolished.

Common Lodging Houses were inspected and found satisfactory.

Houses Let in Lodgings.—Bye-laws for houses let in separate dwellings have been approved and sanctioned by the Local Government Board, and will come into force in 1893.

Housing of the Working Classes Act.—A Closing Order was obtained for six tenements in Harlesden Lane, which have since been demolished.

Infant Life Protection Act, 1872.—Licences for three establishments under this Act have lapsed, and only one new licence has been granted.

Factories and Workshops.—147 laundries were inspected and 5 workshops proper.

Baths and Washhouses.—The Medical Officer advises the establishment of baths and washhouses in the thickly populated part of the District.

WOOD GREEN URBAN SANITARY DISTRICT.

Medical Officer of Health, C. H. Conolly, M.R.C.S.

Estimated population, 27,991.

Births, 982; Birth rate, 35.11 per 1,000 population.

Deaths, 392; Death rate, 14.04 per 1,000 population.

Deaths under 1 year, 116. Infantile mortality, 118 per 1,000 births.

Infectious Diseases Notification.—287 new cases of the notifiable infectious diseases came to the knowledge of the Medical Officer of Health.

Epidemics.—Influenza was the primary cause of 13 deaths, and 218 new cases of sickness from scarlet fever were notified. Of the 18 cases of typhoid fever, and 30 cases of diphtheria notified, a large proportion were situated “in the low-lying part of the District south of Lordship Lane and Station Road.”

Infectious Diseases Hospital.—The want of an Isolation Hospital is increasingly felt, and leads to the practical obligation “to look with undue leniency on many irregularities.” Neighbouring Boards are also experiencing increasing pressure, giving hope of combined action.

Disinfection.—Disinfectants have been supplied gratuitously, and in most cases infected rooms have been fumigated. The amount of infected bedding, clothing, etc., sent to be disinfected by steam has been restricted in order to save expense, but lately a secondhand disinfecting apparatus has been purchased, which, although not so perfect nor so expensive as a steam disinfecter, is stated to serve its purpose.

Mortuary.—The absence of a mortuary has caused considerable inconvenience, but the Board’s offices being now settled there will be little difficulty in providing a site.

House-to-house Inspection.—With cholera in view, an Assistant Sanitary Inspector was appointed, and 129 houses in the crowded part of the District were inspected, in addition to some 200 other houses.

Housing of the Working Classes Act.—Five houses were condemned as unfit for habitation, of which four were closed by Magistrate's Order.

New Roads and Sewers.—A number of new private roads were made up, and new sewers constructed.

House Refuse was removed with fewer complaints and with greater care than usual, especially during the Autumn.

Dairies and Milkshops were periodically inspected, and found satisfactory.

Slaughter-houses.—Licences for two additional slaughter-houses were applied for and refused, on account of their proximity to dwellings.

Open Spaces.—The Board has acquired ten acres of land as an open space, together with Earham Grove House.

BARNET RURAL SANITARY DISTRICT (Part of), PARISH OF SOUTH MIMMS.

Medical Officer of Health, W. Gruggen, L.R.C.P., D.P.H.

Estimated population, (?)

Births (?) ; Birth rate, (?) per 1,000 population.

Deaths, 35 ; Death rate, (?) per 1,000 population.

Deaths under 1 year, 5. Infantile mortality, (?) per 1,000 births.

The population of the entire Rural District is scattered in several villages, and the populations of the rural portions of Barnet and of South Mimms were not found separable. Nor are the number of births separated from other parts of

the Rural District, but the rate for the whole District was 28·8 per thousand living. The deaths at all ages were in South Mimms Village 14, Potter's Bar 18, (both within the Civil Parish of South Mimms) Cottage Hospital 3, making a total of 35. The death rate for the whole Rural District was 16·7 per 1,000. Under one year the deaths numbered in South Mimms 3, Potter's Bar 2, a total of 5. The Infantile mortality for the whole Rural District of Barnet was 95 per 1,000 births. One death at over five years of age from typhoid fever occurred in South Mimms.

Infectious Diseases Notification.—The Act came into force in February, 1890. During 1892 in South Mimms, 3 cases of scarlet fever and 2 of erysipelas, and in Potter's Bar 2 cases of scarlet fever and 1 of diphtheria, were notified.

Infectious Diseases Hospital.—The District is unprovided with accommodation for the isolation of infectious cases. The Medical Officer directs serious attention to the matter.

Water Supply.—The Colne Valley and Barnet Water Companies supply the Rural District, and steps are being taken to obtain a supply for the village of South Mimms.

Sewerage.—The village of South Mimms has an efficient system of sewers, but not Potter's Bar. Endeavours are being made to obtain a site for the treatment of the sewage of the latter.

Sanitary Work.—It is not possible to separate the work done in South Mimms from the table of work completed, which refers to the whole of the Barnet Rural District.

BRENTFORD RURAL SANITARY DISTRICT

Medical Officer of Health, R. G. Burton, M.D.

Estimated population, 701.

Births, 14; Birth rate, 19·9 per 1,000 population.

Deaths, 3; Death rate, 4·3 per 1,000 population

Deaths under 1 year, 1. Infantile mortality, 71 per 1,000 births (one death was that of an adult, non-resident).

The *Infectious Diseases Notification Act* was adopted during the year. No hospital accommodation has been provided for the *isolation of infectious diseases*. A suggestion is made to act conjointly with the Hanwell Local Board, which is stated to be considering a plan.

An old refuse nuisance, caused by the deposit of the contents of London dustbins on the banks of the Grand Junction Canal, recurred at Twyford. The Hendon Rural Sanitary Authority (on the borders of whose District it was situated) took action, and failed to obtain an order for abatement. Meanwhile, a neighbouring private resident has obtained an injunction for three months against the contractor.

The River Brent has given rise to many complaints, due to its filthy state, caused by pollution mainly occurring higher up the stream beyond the District. Action is being taken to prevent pollution within the District.

HENDON RURAL SANITARY DISTRICT.

Medical Officer of Health, B. Campbell Gowan, M.R.C.S., L.R.C.P.

Estimated population, 14,013.

Births, 362; Birth rate, 26·1 per 1,000 population.

Deaths, 183; Death rate, 13 per 1,000 population. Deaths under 1 year, 37. Infantile mortality, 102·2 per 1,000 births.

Infectious Diseases Notification.—The Act is in force in the District, and during the year 181 cases of infectious disease were notified. Measles has recently been added to the schedule of notifiable diseases.

Epidemics.—Harrow Weald suffered from an epidemic of scarlet fever that commenced in August, 1891, and an outbreak of 18 cases of diphtheria also occurred on one property in Harrow Weald. In consequence of complaints an inquiry was held by Dr. Bruce Low, one of the Inspectors of the Local Government Board. An outbreak of five cases of smallpox occurred in the village of Pinner.

Infectious Diseases Hospital.—Speaking of the 41 cases of infectious disease notified from Pinner, the Medical Officer says that probably the diffusion was due to personal contact, or to clothing, and adds, “the want of proper means of isolation was here made strikingly evident.” A suitable site has been placed at the disposal of the Authority, and it is hoped to be occupied by a suitable building.

Disinfection.—Without isolation, fumigation is regarded as valueless, and the Medical Officer deplores the absence of a disinfecting stove.

Housing of the Working Classes Act.—It is roughly estimated that one quarter of the small cottages are unfit for habitation. Atkinson’s Yard at Sudbury is being dealt with under the Act, three typhoid cases having occurred there, and the spot being unwholesome.

Drainage and Sewerage.—There is a total absence of proper house drainage in the villages of Edgware and Little Stanmore, but it is believed that a sewer is about to be constructed.

Nuisances.—The intolerable nuisances formerly abounding at Alperton, have been abated temporarily.

A nuisance arose from a heap of refuse upon the canal bank, near Twyford Abbey, on the far side of the Brent, and beyond the boundary of the District. Unsuccessful

proceedings were taken at the Brentford Police Court to abate it, but subsequently sufficient evidence was obtained "to induce the defendant to submit to an injunction."

Addenda.—Appended to the Report is the text of a leaflet upon cholera, issued in September, 1892, and also a note upon cancer.

STAINES RURAL SANITARY DISTRICT.

Medical Officer of Health, C. Dwight Morris, L.R.C.P., M.R.C.S.

Estimated population, 22,001.

Births, 598; Birth rate, 27·3 per 1,000 population.

Deaths, 377; Death rate, 17·1 per 1,000 population.

Deaths under 1 year, (?) . Infantile mortality, (?) per 1,000 births.

With the exception of the births and deaths the Report only applies to the last four months of the year, the Medical Officer having been confirmed in his appointment at the end of August.

Infectious Diseases Notification.—The Act has been in force in the District since December, 1891.

Epidemics.—Scarlet fever was epidemic during the summer in Feltham, and the schools were closed for nine weeks from July 30th to September 5th.

Infectious Diseases Hospital.—The District is not provided with accommodation for the isolation of infectious diseases.

Water Supply is receiving special attention; when found polluted the Company's water is laid on if practicable.

Drainage and Sewerage.—Building is rapidly extending throughout the District, together with the sinking of wells and cesspools in a loose gravelly soil. Certain sectional Districts might be effectually drained, and Cranford, which works evenly and well, is quoted as an illustration.

Dairies and Cowsheds.—Where structural alterations have been required they have been promptly carried out.

Unhealthy Property.—The adoption of a system of bye-laws is recommended for controlling buildings. The Housing of the Working Classes Act is being put into force.

Nuisances.—The nuisance arising from gipsy encampments on Ashford Common is complained of, and it is hoped that the County Council may issue bye-laws for their regulation. Pig sties are being kept under observation. Many nuisances appear to arise in cottage property. The chief industry of the District being market gardening, the manure traffic gives rise to nuisances, and, it is suggested, possibly disease.

UXBRIDGE RURAL SANITARY DISTRICT

Medical Officer of Health, Charles Roberts, M.R.C.S.

Estimated population, 14,106.

Births, 433; Birth rate, 30·69 per 1,000 population.

Deaths, 257; Death rate, 18·02 per 1,000 population
Deaths under 1 year, 46. Infantile mortality, 106·2 per 1,000 births.

Infectious Diseases Notification.—The Act has been in force since January, 1890, and during the last year 81 cases of infectious disease have been notified.

Epidemics.—An outbreak of 10 cases of scarlet fever occurred in Ickenham, which was quickly checked by removal of the cases to hospital, but proper drainage and pure water are required in this Parish.

Infectious Diseases Hospital.—The District is provided with the Uxbridge Union and Urban Joint Hospital for the

reception of infectious cases, which is situated in the Parish of Cowley. 104 cases were admitted during the year, namely, 40 from the Uxbridge Urban, 12 from the Southall-Norwood Urban, and 52 from the Uxbridge Rural Sanitary District.

Water Supply.—Twelve wells were closed on account of pollution of the water, in the following localities, namely, Harlington-road, 1; Yiewsley, 6; West Drayton, 1; Harefield, 2; Hayes, 2. The Rickmansworth Company's water was laid on in the last and in other cases. The water supply of the District generally appears to leave much to be desired.

Drainage and Sewerage.—The cesspits, drains, and ditches, in Ruislip, as well as stagnant water and refuse give much trouble. The condition of the drainage and ditches in Eastcote has been and is repeatedly complained of by the Medical Officer. In Hillingdon and Cowley both the water supply and drainage are in a bad condition, a system of drainage is urgently required. The sanitary condition of West Drayton is decidedly bad, and a proper system of drainage is urgently called for. The Medical Officer's description of blocked sewers and drains, and overflowing cesspits is appalling, and he suggests that Yiewsley and West Drayton should be included in one scheme. The pollution of wells adds greatly to the danger.

Unfit Dwellings.—A considerable number of cottages in Yiewsley and other parts of Hillingdon and Cowley were reported as unfit for habitation, but one owner is still recalcitrant, but the majority were made habitable.

PART III.



STATISTICAL TABLES.

(A) TABLE OF DEATHS during the Year 1892, in the Sanitary Districts of the COUNTY OF MIDDLESEX, classified according to DISEASES, AGES, and LOCALITIES.

SANITARY DISTRICTS. Where corrections for deaths in Public Institutions have been made. * = non-residents dying within the dis- trict excluded. † = residents dying without the district included.		MORTALITY FROM ALL CAUSES, AT SUBJOINED AGES.							MORTALITY FROM SUBJOINED CAUSES, DISTINGUISHING DEATHS OF CHILDREN UNDER FIVE YEARS OF AGE.																										
		At all ages.	Under 1 year.	1 and under 5.	5 and under 15.	15 and under 25.	25 and under 65.	65 and up- wards.	(i)	1 Smallpox.	2 Scarlatina.	3 Diphtheria.	4 Membranous Croup.	FEVERS.					10 Cholera.	11 Erysipelas.	12 Measles.	13 Whooping Cough.	14 Diarhoea and Dysentery.	15 Rheumatic Fever.	16 Ague.	17 Phthisis.	18 Bronchitis, Pneumonia, and Pleurisy.	19 Heart Disease.	20 Injuries.	21 All other Diseases.	22 TOTAL.				
														5 Typhus.	6 Enteric or Typhoid.	7 Continued.	8 Relapsing.	9 Puerperal.																	
(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	Smallpox.	Scarlatina.	Diphtheria.	Membranous Croup.	Typhus.	Enteric or Typhoid.	Continued.	Relapsing.	Puerperal.	Cholera.	Erysipelas.	Measles.	Whooping Cough.	Diarhoea and Dysentery.	Rheumatic Fever.	Ague.	Phthisis.	Bronchitis, Pneumonia, and Pleurisy.	Heart Disease.	Injuries.	All other Diseases.	TOTAL.						
URBAN.																																			
Acton†	425	141	73	10	19	?	?	Under 5 5 upwds.	4	3	1	24	25	34
Brentford	294	97	35	19	9	?	?	Under 5 5 upwds.	..	2	2	2	..	1	19	4	18	32	..	23	
Chiswick.. .. .	392	115	70	18	13	71	105	Under 5 5 upwds.	..	1	2	1	..	2	1	..	1	..	..	30	27	20	..	..	26	..	3	82	191	..	..	..	..
Ealing	316	61	..	..	..	..	..	Under 5 5 upwds.	..	..	4	..	..	4	..	..	..	..	..	4	..	..	..	..	22	30	24	2	113	201	..	..	..
Edmonton { including Unions, etc. }	682	169	100	21	24	141	227	Under 5 5 upwds.	..	1	7	3	..	..	..	..	..	3	23	22	30	..	..	2	66	3	5	104	269	..	..	..	..
Enfield	458	123	61	23	20	123	103	Under 5 5 upwds.	..	2	4	..	..	3	..	..	1	..	..	3	..	2	2	..	55	108	39	12	82	413	..	..	..
Finchley†	207	43	..	..	..	..	..	Under 5 5 upwds.	..	5	19	..	..	16	..	..	..	..	..	1	5	..	..	..	30	..	..	..	..	..	..	..	..
Friern Barnet*	79	15	..	..	..	..	..	Under 5 5 upwds.	..	2	6	..	..	1	..	..	..	..	..	4	..	11	..	..	11	..	16	3	..	..	..	..	..
Hampton	85	..	..	..	..	..	..	Under 5 5 upwds.	..	1	2	1	..	..	..	..	..	..	..	1	..	..	..	1	..	9	..	..	..	..	..	..	..
Hampton Wick.. .. .	29	5	4	2	..	7	11	Under 5 5 upwds.	..	1	1	1	..	..	..	..	1	..	..	..	..	1	..	5	..	9	..	..	..	..	..	..	..
Hanwell	81	18	12	6	5	25	15	Under 5 5 upwds.	..	..	1	..	..	..	..	..	..	..	..	4	..	1	..	..	4	2	3	..	9	20	..	..	..
Harrow	84	16	10	2	2	27	27	Under 5 5 upwds.	..	1	..	..	..	2	..	..	..	..	..	3	3	3	..	..	2	10	1	..	6	29	..	..	..
Hendon	303	..	..	..	..	..	..	Under 5 5 upwds.	..	1	..	..	..	..	..	..	..	..	..	1	2	2	1	..	9	9	3	1	25	52	..	..	..
Heston and Isleworth	2484	..	..	..	..	..	..	Under 5 5 upwds.	No return.	..	..	..	..	..	..	..	..	..	..	..	1	..	..	6	7	12	1	32	59	..	..	..	..
Hornsey	508	121	45	20	19	134	169	Under 5 5 upwds.	In this return the numbers do not agree.	..	1	6	1	..	..	..	..	..	..	6	13	6	..	..	..	25	7	1	100	166	..	..	..
Southall-Norwood*	75	26	9	5	4	14	17	Under 5 5 upwds.	..	3	5	..	..	3	..	..	10	..	2	1	..	7	1	..	28	93	30	11	146	342	..	..	..
Southgate*	144	35	25	9	7	35	33	Under 5 5 upwds.	..	..	..	1	..	..	..	..	2	..	..	..	5	1	..	5	13	..	1	3	31	..	..	..	..
South Hornsey	214	74	..	..	..	..	..	Under 5 5 upwds.	..	1	2	3	..	1	..	..	..	..	..	..	1	..	..	..	13	..	..	38	60	..	..	..	..
Staines†	72	15	9	1	4	16	27	Under 5 5 upwds.	..	..	2	..	..	..	..	..	..	..	..	..	3	..	..	..	10	21	10	4	32	84	..	..	..
Teddington	140	25	14	13	5	49	34	Under 5 5 upwds.	..	1	1	..	..	4	..	2	..	..	..	14	8	4	1	..	11	34	21	..	..	..	..	..	..
Tottenham	1,237	361	232	75	52	304	213	Under 5 5 upwds.	..	..	..	..	..	..	..	..	..	..	..	..	3	..	..	..	4	9	10	1	24	48	..	..	..
Twickenham	250	42	25	13	9	86	75	Under 5 5 upwds.	..	1	..	2	..	..	..	..	..	..	..	3	..	..	..	19	12	12	3	49	101	..	..	..
Uxbridge†	135	?	..	..	..	..	..	Under 5 5 upwds.	..	29	13	3	..	3	..	..	..	..	..	24	44	47	..	6	111	1	23	289	593	..	..	..
Willesden	945	333	152	37	33	251	139	Under 5 5 upwds.	1	12	5	1	..	13	..	2	..	..	..	..	3	1	6	..	73	161	40	33	293	644	..	..	..
Wood Green†	392	116	55	19	20	103	79	Under 5 5 upwds.	..	1	6	..	..	..	..	..	..	..	..	2	3	1	6	..	9	..	1	41	67	..	..	..
								Under 5 5 upwds.	..	1	3	..	..	..	..	1	1	1	1	1	..	..	..	24	35	13	6	97	183	..	..	..
								Under 5 5 upwds.	..	..	..	..	..	..	..	..	..	..	..	3	1	..	..	..	6	..	1	19	30	..	..	..
								Under 5 5 upwds.	..	..	..	..	..	..	..	1	7	..	..	10	..	..	..	12	17	12	8	38	105	..	..	..
								Under 5 5 upwds.	..	6	12	7	..	..	..	..	1	..	..	42	36	35	..	..	6	101	5	..	234	489	..	..	..
								Under 5 5 upwds.	..	2	6	1	..	6	..	..	4	..	3	6	..	2	10	..	59	72	59	4	275	456	..	..	..
								Under 5 5 upwds.	..	3	3	3	..	..	..	..	..	..	..	14	6	24	..	..	34	..	2	82	171	..	..	..
								Under 5 5 upwds.	..	..	2	..	..	1	1	..	..	..	..	1	..	2	..	24	41	23	8	114	171	..	..	..
RURAL.																																			
(Barnet) South Mimms	35	5	4	1	2	11	12	Under 5 5 upwds.	..	..	..	..	..	1	..	..	..	..	..	1	..	..	..	..	4	..	..	4	9	..	..	..	..
Brentford	3	1	..	..	..	2	..	Under 5 5 upwds.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	1	..	..	..
Hendon	183	35	23	10	7	52	16	Under 5 5 upwds.	..	2	1	3	..	..	..	..	..	..	..	1	8	2	..	..	11	..	1	29	58	..	..	..	..
Staines	377	..	..	..	..	..	..	Under 5 5 upwds.	..	..	4	..	..	2	..	..	..	..	..	1	..	1	..	8	26	13	11	59	125	..	..	..	..
Uxbridge	268	46	31	27	10	57	97	Under 5 5 upwds.	Rest of the return only applies to four months.	..	..	2	4	..	..	..	..	..	..	3	5	5	..	..	21	..	1	36	77	..	..	..	..
								Under 5 5 upwds.	..	1	3	4	..	3	..	..	..	..	..	..	2	2	..	..	24	36	33	10	73	191	..	..	..



SANITARY DISTRICTS.						POPULATION AT ALL AGES.		Registered Births.	Aged under 5 or over 5.	NEW CASES OF SICKNESS IN EACH LOCALITY, COMING TO THE KNOWLEDGE OF THE MEDICAL OFFICER OF HEALTH.													NUMBER OF SUCH CASES REMOVED FROM THEIR HOMES IN THE SEVERAL LOCALITIES FOR TREATMENT IN ISOLATION HOSPITAL.												
						Census 1891.	Estimated to middle of 1892.			1	2	3	4	FEVERS.					10	11	12	13	1	2	3	4	FEVERS.					10	11	12	13
														Typhus.	Enteric or Typhoid.	Continued.	Relapsing.	Puerperal.									Typhus.	Enteric or Typhoid.	Continued.	Relapsing.	Puerperal.				
(b.)	(c.)	(d.)	(e.)	Smallpox.	Scarlatina.	Diphtheria.	Membranous Croup.	Typhus.	Enteric or Typhoid.	Continued.	Relapsing.	Puerperal.	Cholera.	Erysipelas.	Measles.	Smallpox.	Scarlatina.	Diphtheria.	Membranous Croup.	Typhus.	Enteric or Typhoid.	Continued.	Relapsing.	Puerperal.	Cholera.	Erysipelas.									
URBAN.																																			
Acton	24,206	25,000	763	Under 5	13	74	27	13	..	15	..	..	1	..	37	..	..	13													
Brentford	13,738	13,950	492	5 upwds.	..	97	8	2	3	6	..	..	2	..	19	..	..	..	75	2	..	2									
Chiswick	21,963	22,782	679	Under 5	..	8	5	2	..	1	6	..	..	2	..	..	..	..	..	3	1										
Ealing	23,979	26,500	492	5 upwds.	..	44	11	..	..	11	6	..	1	..	27	..	..	..	1	2	..	..	2								
Edmonton (including Unions)	25,381	26,965	941	Under 5	..	119	31	2	..	14	..	..	1	..	50	..	..	..	66	5	..	..	2								
Enfield	31,536	33,570	1,072	5 upwds.	2	28	8	1	..	3	..	..	..	..	7			..	..	..	..	..								
Finchley	31,536	33,570	1,072	5 upwds.	5	100	30	..	..	23	..	..	3	..	38			2	92	1	..	..	9								
Friern Barnet	16,647	17,042	477	Under 5	..	125	37	..	..	4	..	..	2	..	16	..	..	..	36												
Hampton	9,143	*7,004	191	5 upwds.	..	30	8	3	..	2	..	..	1	..	12			..	..	..	..	..								
Hampton Wick	5,822	5,800	144	Under 5	..	..	3	2	..	1	..	..	..	..	..	..	..	1													
Hanwell	2,378	2,378	67	5 upwds.	..	2	1	..	..	1	..	..	..	..	2			..	..	..	..	..								
Harrow	6,139	6,274	161	Under 5	..	1	2	..	..	4	..	..	..	..	..			..	..	..	..	..	
Hendon	5,725	6,876	142	5 upwds.	..	30	7	1	..	5	..	..	..	..	17			..	..	..	..	..								
Heston and Isleworth	15,843	? 16,000	431	Under 5	..	3	4	..	..	2	..	..	..	..	5	..	..	..	1												
Hornsey	26,273	?	?	5 upwds.	No return.													23																	
Southall-Norwood	44,205	46,354	1,169	Under 5	..	27	2	1	..	12	..	..	1	..	37	..	..	..	10												
Southgate	7,627	*5,188	193	5 upwds.	2	79	43	..	..	21	..	..	8	..	52	..	..	..	44	..	..	..	3								
South Hornsey	10,970	*10,740	302	Under 5	..	234	8	1	..	2	..	..	1	..	11	..	..	..	11	2	..	..	1								
Staines	16,892	17,100	389	5 upwds.	..	29	15	5	..	8	..	..	..	..	26			..	15	2	..	..											
Teddington	5,060	5,102	149	Under 5	..	54	1	..	..	8	..	..	..	..	2			..	28	1	..	..											
Tottenham	10,052	10,525	293	5 upwds.	Notification	Act only adopted Sept., 1892.												..	4	..	..	..										
Twickenham	71,343	73,590	2,429	Under 5	..	1	1	..	..	4	..	..	..	..	2			..	1	..	..	..										
Uxbridge	16,027	16,000	406	5 upwds.	..	2	4	1	..	1	..	..	..	..	8			..	8	..	..	..										
Willesden	8,206	8,206	197	Under 5	..	9	4	1	..	1	..	..	..	..	8			..	28	1	..	..											
Wood Green	61,265	65,741	2,085	5 upwds.	..	433	105	1	..	94	2	..	8	..	70			..	4	..	..	..										
	25,831	27,991	982	Under 5	4	59	30	1	..	7	..	..	4	2	20	..	..	..	28	1	..	..											
				5 upwds.	..	4	1	..	..	..	..	..	..	..	1	..	..	..	4	..	..	..										
				5 upwds.	..	24	14	..	..	2	..	..	1	..	8	..	..	..	1	..	..	..										
				5 upwds.	..	112	36	3	..	..	..	..	..	..	..	..	..	..	10	10	..	..											
				5 upwds.	5	254	105	1	..	28	..	..	4	1	85	..	..	3	39	4	..	..	3	..	..	..	..	1			
				5 upwds.	..	218	30	3	..	18	1	..	1	..	16			..	..	..	..	..								
RURAL.																																			
(Barnet) South Mimms	2,966	?	?	Under 5	..	2	1	..	..	..	..	..	..	..	2			..	..	..	..										
Brentford	660	701	14	5 upwds.	..	3	..	..	..	..	..	..	..	..	..			..	..	..	..
Hendon	13,834	14,013	362	Under 5	Notification	Act only adopted during this year.												..	10	..	..	..										
Staines	21,832	22,001	598	5 upwds.	5	114	40	3	..	10	..	..	..	..	9			..	..	..	..										
Uxbridge	14,439	14,106	433	Under 5	Rest of return only applies to four months.													..	11	..	..	..										
				5 upwds.	..	14	2	6	..	2	..	..	..	..	..	..	..	24	8	..	..	2	..	2	5						

Sanitary Districts.	Inspections.												Notices.				Dwelling Houses.				Houses let in separate Dwellings or Lodgings.			Common Lodging Houses.			Canal Boats used as Dwellings.			Movable Dwellings, Caravans, Tents, Sheds, &c.																																																																																																																																																																																																																										
	Complaints Received.	Cases of Infectious Disease Notified.	Houses Inspected from House-to-House.	Premises periodically Inspected.	Total Number of Inspections.	Total Number of Re-Inspections after Order or Notice.	Total Number of Houses, Premises, &c., Inspected.	Letters Written.	Cautionary Notices Given.	Statutory Orders Issued.	Summonses Served.	Convictions Obtained.	Houses, Premises, &c., Cleansed, Repaired, &c.	Closed as Unfit for Habitation.	Reopened after Repairs, Alterations, &c.	Demolished.	Illegal Underground Dwellings Vacated.	Number Registered under Bye-Laws.	Periodical, Frequency, or Number of Inspections.	Number of Contraventions.	Number Registered under Bye-Laws.	Periodical, Frequency, or Number of Inspections.	Number of Contraventions.	Number Registered under the Acts.	Periodical, Frequency, or Number of Inspections.	Number of Contraventions of Regulations.	Number Observed during the Year.	Number of Nuisances therefrom Abated.	Number Removed from District.																																																																																																																																																																																																																											
Asterisks or other signs occurring opposite a District, signify that those columns of the District are taken together.																																																																																																																																																																																																																																																								
URBAN.																																																																																																																																																																																																																																																								
Acton	166	visits 380	}	..	..	481	258	212	82	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	13																																																																																																																																																																																																				
Brentford	117																														{	about 800	1,456	..	269	41	1	1	120	13	7	10	145	..	207	197	22																																																																																																																																																																																																		
Chiswick	83																																																						404	..	1,643	..	414	..	15	..	113																																																																																																																																																																								
Ealing	112	..	165	64																																																																																																																																														
Edmonton																																																																																																																				
Enfield																																																																																										
Finchley																																																																
Friern Barnet	143																																																																																																																																																																																								743	1,171	100	1	..	14																																					
Hampton	No																																																																																																																																																																																																																			Return										
Hampton Wick
Hanwell	No	Return	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..																																																																																																																																																																																																		
Harrow	No																												Return																																																																																																																																																																																																		
Hendon	1,878	94	21																																																																																																																																																																								
Heston and Isleworth	3,052	..	945	62	8	6	115	..	17	3	..	1	2																																																																																																																																														
Hornsey	381	25	10																																																																																																																				
Southall-Norwood	20	27	0	205	3																																																																																										
Southgate	1,084	..	124	2																																																																
South Hornsey	1,024																																																																																																																																																																																								76	492	1,200	55	281	3	..	84																																					
Staines	5										
Teddington																																																																																																																																																																																																																																														{	visits 1,305	}
Tottenham	402	..	..	..	..	..	..	2,255	..	..	..	143	5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..																																																																																																																																																																																																													
Twickenham																																																																																																																																																																																																		
Uxbridge	No																																																						Summarised	Return																																																																																																																																																																								
Willesden	10	6	..	6																																																																																																																																														
Wood Green	146																																																																																																										{	visits 837	}	129	432	..	219	11	13																																																																																																																				
RURAL.																																																																																																																																																																																																																																																								
(Barnet), South Mimms	No																																																																																																																																				separable	from	Barnet	R.S.D.	6	26	1																																																																																							
Brentford	No																																																																																																																																				Return																																																																																							
Hendon																																																																																							
Staines	56	236																																																																																							
Uxbridge	No	Return																																																																																																																		

(C II).

Sanitary Districts.	Water Supply and Water Service.												Privy and Ash Pits, Ash and Earth Closets.			Drainage and Sewerage.																	
	Wells.			Houses, Water Laid on to.	Percentage of Houses Supplied from Mains.	Cisterns.			Flush Cisterns Provided to W.C's.	Draw-Taps Removed from Cisterns to Main.	Percentage of Houses Supplied on Constant System.	Water Closets.					Percentage of Houses Provided with Water Closets.	Drains.						Cesspools.		Percentage of Houses Draining into Sewers.	Sewers.						
	New Sunk.	Cleansed, Repaired, Etc.	Closed as Polluted.			New, Provided.	Cleansed, Repaired, Covered, Etc.	Overflow Pipes Disconnected from Drains				New Constructed.	New Apparatus Provided.	Repaired, Cleansed, Etc.	Supplied with Water, or Supply Rendered Efficient.	Ventilated.		Examined, Tested, Exposed, Etc.	Repaired, Trapped, Etc.	Waste Pipes, Etc., Disconnected.	Soil Pipes and Drains Ventilated.	Disconnecting Traps or Chambers Inserted.	Reconstructed.	New Laid.	Rendered Impervious.		Abolished, and Drain Connected to Sewer.	Yards of New Sewers Laid.	Yards of Sewers Reconstructed.				
URBAN.																																	
Acton	70	207	..	..	41	..	..	..	..	..	..	..	..	..	..
Brentford	5	..	..	61	..	61	..	..	..	..	..	..	..	..	70	207	..	..	..	..	..	..	..	..	..	..	..	..	..
Chiswick	11	..	..	127	18	..	123	..	..	..	..	..	..	..	227	..	..	..	..	..	227	..	..	..	..	..	3	..	..
Ealing	15	..	..	..	..	..	..	..	..	..	..	..	..	5	31	24	38	..	..	{ 39 20 }	..	..	..	..	..	..	..	..	..
Edmonton	37	..	..	..	..	..	14	..	63	..	..	..	{ 26 22 }	41	14	..	..	59	..	7	..	..
Enfield	24	..	..	..	..	..	..	..	..	..	..	..	18	..	..	72	..	..	..	213	..	30	..	37	..	..	..	..	..
Finchley	86	..	..	..	..	179	..	..	..	..	..	..	16	..	78	207	..	..	70	105	48	75	..	103	..	..	11	..	..
Friern Barnet	3	36	5	..	..	..	..	..	..	..	5	..	211	11	..	..	..	* 53	..	5	..	..	..	..	..	..	..
Hampton
Hampton Wick	6	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Hanwell
Harrow	7	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Hendon	24	25	..	..	..	{ 6 37 }	6	..	..	..	..	..	..	..	..
Heston and Isleworth	1	1	..	6	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4	..	..	..	172	..	..	..	..	..	43	..	..
Hornsey	12	3	3	..	..	..	..	3	..	..
Southall-Norwood	4	..	..	..	..	..	..	..	..	21	..	..	..	87	..	..	..	..	..	{ 6 27 }	10	..	..	..	..	..	..	..	..
Southgate	26	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
South Hornsey	21	..	..	..	..	..	..	..	..	..	{ 89 69 }	..	..	..	..	..	228 360 }	215	125	..	95	..	..	5	..	..
Staines	11	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Teddington	56 ?	..	..	..	23	..	..	..	..	..	..	..	..	..	..	..	..	..	..	77	..	..	..	..	..	..	..	..	..
Tottenham	1	..	..	..	55	..	145	..	..	..	..	..	..	82	58	31	..	..	980	31	97	49	..	416	..	..	..	2,610	600
Twickenham	2	22	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	20	..	..	..	..	..	..	..	..
Uxbridge
Willesden
Wood Green	5	..	..	42	..	82	..	..	..	..	..	..	..	25	..	18	..	..	..	197	39	99	10	..	..	..	..	..	..
RURAL.																																	
(Barnet) South Mimms
Brentford
Hendon	5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	6	..	..	..	..	..	..
Staines	3	11	13	18	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	29	..	..	..	..	..	..	..	..
Uxbridge

TABLE III.

COUNTY OF MIDDLESEX.—SANITARY WORK.

Sanitary Districts.	Schools.			Workshops and Workplaces.			Laundries.			Bakehouses.			Slaughterhouses.			Cow-sheds.			Dairies and Milk-shops.			Unsound Food.		Adulterated Food.		Offensive trades.			Mortuaries.			
	No. in District.	Periodical frequency or No. of Inspections.	No. found defective.	No. in District.	Periodical frequency or No. of Inspections.	Contraventions of Factory Acts.	No. in District.	Periodical frequency or No. of Inspections.	Contraventions of Factory Acts.	No. in District.	Periodical frequency or No. of Inspections.	Contraventions of Factory Acts.	No. on Register.	Periodical frequency or No. of Inspections.	Contraventions of Bye-laws.	No. on Register.	Periodical frequency or No. of Inspections.	Contraventions of Bye-laws.	No. on Register.	Periodical frequency or No. of Inspections.	Contraventions of Bye-laws.	Animals seized.	Articles or parcels seized.	Samples taken.	Found adulterated.	No. of premises in District.	Periodical frequency or No. of Inspections.	Contraventions of Bye-laws.	Accommodation.	No. of bodies received.		
URBAN.																																
Acton	14	..	..	..	..	..	..	..	..	22	..	..	177	..	..	75	..	..	..	..	1	5	..	..	..	..	..	..	1	
Brentford	14	39	..	..	2	..	..	..	..	..	..	..
Chiswick	15	..	..	7	..	..	*	..	..	27*	..	..	..	..	..	..	..	..	..	..	..
Ealing	456	..	..	693	..	..	{ 375 624	..	..	..	..	..	..	..	..	..	..
Edmonton	19	..	..	*	..	..	56*	..	..	..	..	..	..	..	..	..	..
Enfield	27	..	..	19	..	..	*	..	..	56*	..	..	..	..	..	..	..	..	..	..
Finchley		
Friern Barnet	5	..	..	2	..	..	6	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Hampton		
Hampton Wick		
Hanwell		
Harrow		
Hendon..	60	..	..	11	..	..	21	..	..	..	..	..	36	..	..	..	..	..	..	..	..	..	..
Heston and Isleworth..	18	..	1	25	..	..	14	..	..	..	..	29	3	..	..	..	..	..
Hornsey	10	10	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Southall-Norwood	6	..	..	10	..	..	2	..	..	..	..	..	..	..	..	..	..	..
Southgate	12	..	..	7	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
South Hornsey	14	..	..	..	..	..	..	..	..	10	..	..	4	..	..	*	..	..	16*	..	..	..	..	..	..	..	..	..	12	
Staines		
Teddington		
Tottenham	112	..	..	..	..	..	328	..	..	502	..	..	..	..	..	205	..	..	20	..	..	..	..	..	..	108		
Twickenham	1	..	..	..	..
Uxbridge		
Willesden	5	..	..	147	..	..	41	..	..	9	..	..	..	..	..	38	..	3	..	..	..	..	..	..	..	..	..
Wood Green	6	..	..	13	*	..	29	84*	..	..	..	..	..	..	..	..	..	5		
RURAL.																																
(Barnet) South Mimms	62	..	..	34	..	..	..	..	..	..	..	..	..	..	..
Brentford		
Hendon..		
Staines		
Uxbridge		

TABLE IV.
COUNTY OF MIDDLESEX.—SANITARY WORK.

Sanitary Districts.	Disinfection.			Dust.					Dampness.								Other Nuisances.							Contagious Diseases of Animals.			Infant Life Protection Act.		
	Rooms fumigated.	Rooms stripped and cleansed.	Articles disinfected or destroyed.	Dust-bins repaired.	New bins provided.	Movable receptacles substituted for fixed.	Periodical frequency of dust removal.	Number of complaints of non-removal received.	Roofs repaired, &c.	Guttering and rain-pipes repaired, &c.	Gardens, Areas, &c., levelled and drained.	Yards paved and drained.	Surface adjoining houses paved.	Dry areas provided.	Ventilation below floor provided.	Basements rendered impervious.	Overcrowding.	Smoke.	Accumulations.	Foul ditches, ponds, &c.	Foul pigs and other animals.	Other nuisances.	Outbreaks.	Animals infected.	Animals destroyed.	Number of licensed premises.	Number of children.	Number of deaths.	
URBAN.																													
Acton	70	..	70 lots	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	166	205						
Brentford	87	15	152	..	52	..	..	..	..	122	..	..	..	..	..	..	8	..	22	..	3	30						
Chiswick	48	..	..	19	20	..	..	341	..	..	..	..	..	..	..	..	5	..	15	..	13							
Ealing	91	..	..	..	38	..	..	..	35	..	..	..	..	..	..	..	1	..	..	..	..	107						
Edmonton .. ..	..	..	..	..	41	..	..	..	5	..	..	7	..	..	..	..	5	1	21	..	4	47						
Enfield	289	..	414 lots	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	16	..	..	55						
Finchley	104	..	..	..	110	..	..	..	..	..	..	..	..	..	..	..	..	..	3	5	..	41						
Friern Barnet	30	..	..	13	41	..	..	3,678	..	..	..	..	..	..	..	..	..	..	5	..	2							
Hampton .. ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	74	..	..						
Hampton Wick .. ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Hanwell .. ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Harrow .. ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	30	{ 3 11 }	3	{ 45 10 30 314 }						
Hendon .. ..	..	..	..	..	22	..	..	..	..	..	..	..	..	..	..	..	14	5	569	4	14							
Heston and Isleworth ..	189	..	..	..	..	..	..	..	*	15*	..	..	..	..	..	..	1	..	1	..	..	70						
Hornsey	200	..	..	..	..	..	Weekly	..	..	8	..	..	..	..	..	..	1	..	1	..	..						
Southall-Norwood .. ..	..	..	..	..	..	..	Weekly	..	..	..	..	10	..	..	..	..	2	..	19	3	1	108						
Southgate .. ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	15	4	17	..	4							
South Hornsey .. ..	..	..	..	..	57	..	..	2,633	26	15	..	19	..	..	..	..	..	..	..	..	..	70						
Staines .. ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	..	..	166						
Teddington .. ..	..	..	..	..	..	..	..	..	10	..	..	..	..	..	..	..	..	..	3	..	{ 19 29 }	113						
Tottenham	340	..	36	51	60	..	..	312	..	..	..	49	..	..	..	..	..	3	22	..	{ 19 29 }	..						
Twickenham .. ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4	..	..	..	..	..	2					
Uxbridge .. ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	3	
Willesden .. ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	26	..	20	42						
Wood Green	201	208	148	..	23	..	..	79	25	37	..	30	..	..	15	..	1	..	26	..	20							
RURAL.																													
(Barnet) South Mimms ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..						
Brentford .. ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	5	5	{ 20 13 264 }						
Hendon	61	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Staines .. ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Uxbridge .. ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..

(D.)

ADMINISTRATIVE COUNTY OF MIDDLESEX.—CENSUS 1891.
Urban and Rural Sanitary Districts with constituent Civil Parishes, Area, Inhabited Houses, and Population.

Sanitary Districts.	Constituent Civil Parishes.	Area in Statute acres. Census 1891.	Census 1891.		Census 1881.		Notes on Alterations of Areas.
			Inhabited Houses.	Population.	Inhabited Houses.	Population.	
Acton.. .. Urban	Acton.. ..	2,305	4,054	24,206	2,853	17,126	See note to Enfield.
Barnet (part of) .. Rural	South Mimms (part of) ..	6,301	617	2,966	567	2,628	
Brentford Urban	1,109	2,610	13,738	2,240	11,505	{ Interchange with Ealing U.S.D. by L.G.B.O., 21st May, 1885.
	New Brentford	216	408	2,069	407	2,138	
	Ealing (part of)	893	2,202	11,669	1,833	9,667	
Brentford Rural	3,041	142	660	142	683	{ Part of Northolt, Uxbridge R.S.D. transferred to Greenford by D.P.A., 1882 and L.G.B.O., 24th March, 1887.
	Greenford	2,127	122	545	125	574	
	Perivale	633	9	55	4	34	
	Twyford Abbey	281	11	60	13	75	
Chiswick Urban	Chiswick	1,245	3,787	21,963	2,657	15,975	{ Part of Ealing (Bedford Park Estate) transferred to Chiswick by L.G.B.O., 23rd December, 1878. Part of Chiswick transferred to Ealing by L.G.B.O., 23rd December, 1878. Interchange with Brentford U.S.D. by L.G.B.O., 21st May, 1885. Separated from Southgate by Edmonton L.B. Act, 1881. Also interchange of areas with Enfield Parish under D.P.A., 1882.
Ealing Urban	Ealing (part of)	2,928	4,224	23,979	2,661	15,769	
Edmonton Urban	Edmonton (part of) ..	3,903	4,194	25,381	2,363	15,174	
Enfield Urban	12,611	5,808	31,536	3,538	18,944	{ By L.G.B.O. 8th May, 1888, two detached parts of Enfield U.S.D. (one a detached part of Enfield Civil Parish and the other a detached part of that Parish amalgamated with Monken Hadley Civil Parish) and part of the South Mimms Civil Parish, in the Barnet R.S.D., were added to the East Barnet Valley U.S.D.
	Edmonton (part of) a formerly detached part of the Civil Parish of Enfield	9	—	—	—	—	
Finchley Urban	Enfield (part of)	12,602	5,808	31,536	3,538	18,944	{ Created by L.G.B.O., 5th December, 1883. Extended by M.C.C. and L.G.B.O., 29th July, 1891, to include a detached part of Hornsey Civil Parish and U.S.D. See also Hornsey.
	Finchley	3,384	2,917	16,647	1,884	11,191	
Friern Barnet .. Urban	Friern Barnet	1,304	1,117	9,173	689	6,424	{ Created by L.G.B.O., 27th August, 1885.
Hampton Urban	Hampton	2,036	1,181	5,822	917	4,776	
Hampton Wick .. Urban	Hampton Wick	1,315	457	2,378	417	2,164	{ Created by L.G.B.O., 27th August, 1885.
Hanwell Urban	Hanwell	1,067	1,069	6,139	717	5,178	
Harrow Urban	Harrow-on-the-Hill (part of)	1,047	1,103	5,725	858	5,558	{ Created by L.G.B.O., 27th August, 1885.
Hendon Urban	Hendon	8,882	2,395	15,843	1,571	10,484	
Hendon Rural	19,756	2,651	13,834	2,018	10,987	{ Created by L.G.B.O., 27th August, 1885.
	Edgware	2,090	165	864	152	816	
	Great Stanmore	1,484	297	1,473	267	1,312	
	Harrow (part of)	8,980	1,423	7,263	860	4,719	
	Kingsbury	1,829	122	581	142	759	
	Little Stanmore	1,591	177	926	173	862	
	Pinner	3,782	467	2,727	424	2,519	
	.. ..	6,967	4,726	26,273	4,064	22,727
	Heston	3,823	1,683	10,389	1,563	9,754	
	Isleworth	3,144	3,043	15,884	2,501	12,973	
Hornsey Urban	Hornsey (part of)	2,809	7,489	44,205	3,665	22,485	{ A detached part of the Parish of Clerkenwell, situated in Hornsey, and containing in April, 1891, 54 inhabited houses and 318 persons, is not included in these figures. A detached part of Hornsey Civil Parish was under the D.P.A., 1882, added to Friern Barnet Civil Parish. See further note under Friern Barnet. Created by M.C.C. and L.G.B.O., 16th Jan., 1891. Created and separated from the Edmonton U.S.D. by the Edmonton L.B. Act, 1881. Extended by M.C.C. and L.G.B.O., 8th Jan., 1892, to include part of Tottenham Civil Parish previously in Wood Green U.S.D. Part of Hornsey, including two detached parts situated between Stoke Newington, Hackney, and Islington.
Southall-Norwood .. Urban	Norwood	2,461	971	7,627	715	6,681	
Southgate Urban	3,578	2,038	10,970	1,524	8,289	{ Divided by the Tottenham L.B. Act, 1888, into Tottenham and Wood Green U.S.Ds.
	Tottenham (part of) ..	1	—	—	—	—	
South Hornsey .. Urban	Edmonton (part of) ..	3,577	2,033	10,970	1,524	8,289	{ Hillingdon includes a formerly detached part of the Civil Parish of Cowley. Area of Uxbridge Parish reported by Ord. Survey Dep. to be affected by D.P.A., but Reg.-Gen. failed to obtain details. L.G.B.O., 3rd Aug., 1883. Part of Cowley transferred to Hillingdon by D.P.A., 1882. Remaining part created a Civil Parish by L.G.B.O., 3rd August, 1883. Part of Hillingdon transferred from Cowley and Ickenham, and part to Ickenham by D.P.A., 1882. Part of Ickenham transferred from Hillingdon and part to Hillingdon by D.P.A. Part of Greenford Parish, Brentford R.S.D. transferred to Northolt by D.P.A., 1882, and L.G.B.O., 24th March, 1887. Extended by L.G.B.O., 14th June, 1883, "confirming agreement as to boundaries under Willesden L.B. Act, 1876." Created by Tottenham L.B. Act, 1888; see also Tottenham. Part of area transferred to Southgate U.S.D. by M.C.C. and L.G.B.O., 8th January, 1892. See also Southgate.
	Hornsey (part of)	230	2,223	16,892	2,060	14,593	
	Staines	1,843	1,022	5,060	888	4,628	
	.. ..	22,488	4,151	21,832	3,485	19,146
	Ashford	1,402	362	2,700	273	1,484	
	Bedfont	1,926	337	1,815	310	1,452	
	Cranford	737	108	507	102	503	
	Feltham	1,790	592	3,661	414	2,909	
	Harlington	1,465	306	1,542	307	1,538	
	Harmondsworth	3,307	418	1,914	383	1,812	
	Hanworth	1,373	266	1,309	217	1,040	
	Laleham	1,301	105	504	107	514	
	Littleton	1,038	20	99	24	126	
	Shepperton	1,491	286	1,299	272	1,285	
	Stanwell	3,999	460	2,383	373	2,156	
	Sunbury	2,659	841	4,099	703	4,297	
	Teddington	1,214	1,935	10,052	1,216	6,599	
	Tottenham (part of) ..	3,010	11,812	71,343	6,066	36,574	
	Twickenham	2,415	3,099	16,027	2,360	12,479	
	.. ..	862	1,723	8,206	1,606	7,669
Uxbridge Urban	Hillingdon (part of) ..	775	1,064	5,052	919	4,323	
	.. ..	87	659	3,154	687	3,346
	.. ..	23,421	2,860	14,439	2,562	13,164
	Cowley	272	67	322	57	290	
	Harefield	4,621	375	1,867	325	1,503	
	Hayes	3,311	564	2,651	575	2,891	
	Hillingdon (part of) ..	4,110	1,053	5,745	915	5,157	
	Ickenham	1,464	81	396	80	399	
	Northolt	2,180	99	504	94	460	
	Ruislip	6,585	383	1,836	316	1,455	
Willesden Urban	West Drayton	878	238	1,118	200	1,009	
	Willesden	4,383	8,162	61,265	3,203	27,613	
Wood Green Urban	Tottenham (part of) ..	1,631	4,551	25,831	1,656	9,882	

(E)

ADMINISTRATIVE COUNTY OF MIDDLESEX—CENSUS 1891.

Registration District.	Registration Sub-District.	Civil Parish.	Name of Institution.	Total Number of Inmates, including Officers.	Number of Special Inmates.	Sanitary District.	
Middlesex Registration County.							
Staines ..	Sunbury	Sunbury	Lunatic Asylum (Private), Halliford House	42	27	Staines Rural	
		Feltham	Mrs. Hilton's Convalescent Training Home for Orphan Girls ..	17	15	" "	
			London County Council Industrial School for Boys	866	726	" "	
" ..	Staines	Ashford	Workhouse (West London District School)	784	709	" "	
		Stanwell	Workhouse	194	180	" "	
		East Bedfont ..	Middlesex Industrial School for Girls	17	14	" "	
		Harlington ..	Cranford, Harlington, and Harmondsworth Cottage Hospital ..	4	2	" "	
Uxbridge ..	Hillingdon	Hillingdon	Workhouse	190	179	Uxbridge Rural	
			Hillingdon Cottage Hospital	8	5	" "	
			Joint Hospital for Infectious Diseases	8	5	" "	
" ..	Hayes	Hayes	Lunatic Asylum (Private), Moorcroft House	64	40	" "	
			Hayes Cottage Hospital	4	2	" "	
			Wood End House Lunatic Asylum (Private)	33	15	" "	
			Lunatic Asylum (Private), Hayes Park	30	13	" "	
		Southall-Norwood ..	Workhouse Schools (St. Marylebone Parish)	335	306	Southall-Norwood Urban ..	
			London County Lunatic Asylum, Hanwell	2,104	1,889	" " " " ..	
			Lunatic Asylum (Private), The Shrubbery	16	5	" " " " ..	
			Lunatic Asylum (Private), Featherstone Hall	24	10	" " " " ..	
			Lunatic Asylum (Private), Vine Cottage	20	10	" " " " ..	
Brentford ..	Isleworth	Heston	Barracks	1,218	890	Heston & Isleworth Urban ..	
			Infectious Diseases Hospital	8	5	" " " " ..	
		Isleworth	Workhouse	474	456	" " " " ..	
			Workhouse (Brentford District Schools)	258	235	" " " " ..	
			Hounslow Cottage Hospital	6	0	" " " " ..	
" ..	Twickenham	Twickenham	Lunatic Asylum (Private), Wyke House	56	27	" " " " ..	
			Royal Military School of Music (Kneller Hall)	169	154	Twickenham Urban ..	
			St. John's Hospital	12	8	" " " " ..	
			Cottage Hospital	3	1	" " " " ..	
" ..	Brentford	New Brentford ..	Brentford Isolation Hospital	9	8	Brentford Urban ..	
		Ealing	Ealing Cottage Hospital	19	13	?	
			Ealing Isolation Hospital	7	4	?	
			Royal India Lunatic Asylum	113	82	?	
" ..	Chiswick	Chiswick	Lunatic Asylum (Private), Manor House	79	34	Chiswick Urban ..	
" ..	Acton	Acton	Invalids Home	13	10	Acton Urban ..	
		Hanwell	Workhouse, Central London District School (City of London, and St. Saviour's, Southwark)	915	809	Hanwell Urban ..	
			St. Joseph's Convalescent House	33	27	" " " " ..	
Hendon ..	Harrow	Harrow-on-the-Hill	Harrow Cottage Hospital	7	4	Harrow Urban ..	
			Paddington Green Children's Hospital Convalescent Home ..	17	13	?	
" ..	Edgware	Great Stanmore ..	Stanmore Cottage Hospital	7	4	Hendon Rural ..	
		Little Stanmore ..	The " Mary Wardell " Convalescent Home	28	15	" " " " ..	
		Edgware	The Priory Home for Incurables	29	20	" " " " ..	
	Willesden	Willesden	Dr. Allinson's Cottage Hospital	21	15	Willesden Urban ..	
			St. Monica's Home for the Sick	57	41	" " " " ..	
" ..	Hendon	Hendon	Workhouse	262	256	Hendon Urban ..	
			Workhouse Schools	75	66	" " " " ..	
			Hospital for Infectious Diseases	4	2	" " " " ..	
			Lunatic Asylum (Private), Hendon Grove	30	11	" " " " ..	
			St. Margaret's Industrial School	124	107	" " " " ..	
Barnet ..	South Mimms	South Mimms	Barracks	65	23	?	
			Potter's Bar Cottage Hospital	8	5	Barnet Rural (South Mimms)	
			Convalescent Home	6	4	?	
" ..	Finchley	Friern Barnet	London County Lunatic Asylum (Colney Hatch)	2,458	2,255	Friern Barnet Urban ..	
		Finchley	National Hospital for Paralysis and Epilepsy (Female Branch) ..	22	18	Finchley Urban ..	
			Fever Hospital	3	1	" " " " ..	
			Woodside Home for Incurable and Infirm Women	60	44	" " " " ..	
Edmonton ..	Hornsey	Hornsey	Convalescent Hospital for Children	42	31	?	
			Isolation Hospital (Hornsey Local Board)	5	3	?	
" ..	Tottenham	Tottenham	Tottenham Training Hospital	102	55	?	
" ..	Edmonton	Edmonton	Workhouse (Strand Union)	1,068	1,037	Edmonton Urban ..	
			Workhouse, Infant Establishment (Strand Union)	278	250	" " " " ..	
			Workhouse (Edmonton Union)	561	537	" " " " ..	
			Workhouse, Metropolitan Asylums Board Hospital (Winchmore Hill)	348	233	?	
	Enfield	Enfield	Officers' Quarters, Royal Small Arms Factory	40	5	?	
			Workhouse, Enfield	163	148	?	
			Workhouse Schools (Edmonton Union)	393	352	?	
Surrey Registration County.							
Kingston ..	Hampton	Hampton	Hampton Court Palace Barracks	49	37	Hampton Urban ..	
		Teddington ..	Teddington and Hampton Wick Cottage Hospital	7	4	Teddington Urban ..	
			Lunatic Asylum (Private), Normansfield	319	140	" " " " ..	
			Lunatic Asylum (Private), Goudhurst	11	2	" " " " ..	



